# JOSEPH WOODWELL COMPANY

PITTSBURGH, PENNA.



## HARDWARE

80TH ANNIVERSARY EDITION

#### 80<sup>TH</sup> Anniversary Edition General Catalogue

for

WITH COMPLIMENTS OF

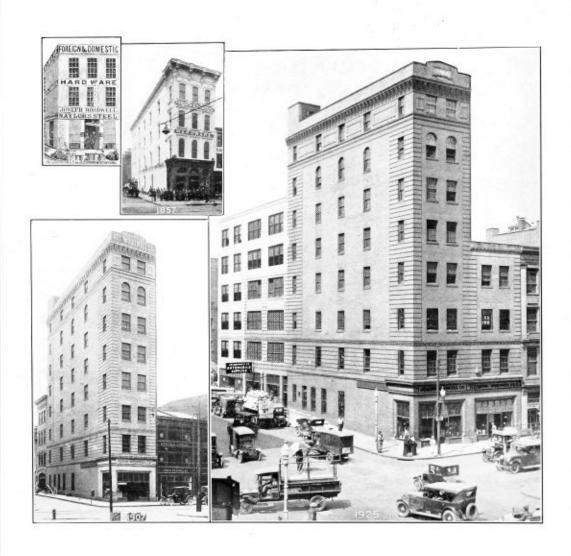
#### JOSEPH WOODWELL COMPANY

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201-203 WOOD STREET PITTSBURGH, PENNA.



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# JOSEPH WOODWELL COMPANY

Jobbers of

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You can eliminate this waste by placing your orders for hardware and automobile supplies with us, as we carry very large and complete stocks of both.

#### Instructions For Ordering

In Ordering, full shipping address and preferred routes of shipment should be designated, otherwise we will forward by the route we think the cheapest and most expeditious.

All responsibility for the safe delivery of goods, on our part, ceases when

we furnish the receipt of the Common Carrier to whom they are entrusted.

In case of failure on the part of the Common Carrier to deliver goods, or in the event of their being damaged in transit, we will cheerfully render all the assistance we can towards the recovery of the goods or their value, but in no case will we assume any responsibility for loss or damage to shipments for which we hold the receipt of Common Carrier.

All goods sent parcels post will be insured by us and the cost of this insur-

ance charged to the customer on the invoice following.

#### Terms

To all persons unknown to us, or who have not a well recognized commercial standing, satisfactory to us, our terms are cash with order.

To parties having a known and satisfactory credit, our terms are: Two per cent 10th prox.—30 days net.

All overdue accounts subject to sight draft without notice.

All overdue accounts will be subject to charge for interest from date of maturity.

All quotations are made for immediate acceptance, unless otherwise agreed upon.

All price lists, discounts and quotations are subject to market changes without notice.

All prices and quotations for goods are F. O. B. Pittsburgh, unless otherwise stated.

All claims for shortage or deductions must be made on receipt of goods and invoice.

All orders will be accepted with the understanding that the terms and conditions enumerated above are agreed to.

#### Returned Goods

When orders have been correctly filled, we can not allow the return of goods, unless a full explanation has been made and our consent obtained in advance. If accepted, all goods returned in a salable condition—so they can be sold as new goods—will be credited at prevailing prices less 10 per cent service, rehandling charge, and shipping expenses. Goods returned must have all charges prepaid. When returning goods for repairs, credit or exchange, mark each package plainly with your name and address. At the same time write us fully by separate mail, giving specific details covering invoice number and date of our letter authorizing return.

#### FOREWORD

To Our Customers and Friends:

This is the eightieth year of our Organization.

It gives us great pleasure to present to you our New General Catalogue at this time, because we are proud of our record and the confidence so generally reposed in us.

The issuing of this Catalogue is prompted by our earnest desire to give you complete service. Our object has been to supply you with a Catalogue that is compact and easy to handle, illustrating and describing our line in an intelligent manner.

In arranging this Catalogue we have assembled all kindred lines as nearly as possible. You will find this arrangement very helpful in making up your Mail Orders.

All orders are shipped promptly; our shipping facilities cannot be surpassed for Quick Delivery to any point on account of our central location.

Owing to the constant fluctuation of Markets we have not given Net Prices, but have shown Standard Lists where practical. Upon request we will promptly quote Net Prices on any item shown in this Catalogue.

For eighty years our policy has had for its object, the entire satisfaction of our customers, and upon this idea our business has expanded to its present proportions.

We take this opportunity to thank our many patrons for their liberal support during these many years, and assure you of our best efforts to give satisfactory service always, we solicit your continued patronage.

Your very truly,

Joseph Woodwell Company.



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## DRILL SLEEVES

#### MORSE



No. 202-For Taper Shank Tools

Polished Steel, used for increasing size of tang on taper shank drills or reamers.

Size Hole Taper No Shank Taper No Length, Inches Weight Each, Lbs Each	1 2 3 % 1/6	1 to 3 1 3 3 18 1/2 2 . 40	1 to 4 1 4 4 % 1½0 3.00	1 to 5 5 6 1/8 3 1/10 4 · 40
Size Hole Taper No Shank Taper No Length, Inches Weight Each, Lbs Each	2 3 4 7 %	2 to 4 2 4 4 % 1 3.00	2 to 5  2  5  6 ½  3  3.00	3 to 4 3 4 5% 5%
Size Hole Taper No Shank Taper No Length, Inches Weight Each, Lbs Each	3 5 6 1/8 2 1/2	4 to 5 4 5 6 % 2 % 4 . 40	4 to 6 4 6 8 5% 6 10 . 00	5 to 6 5 6 8 % 5 ½ 10 . 00



No. 232-For Short Shanks

Used for drills or reamers of which the original tangs have been broken, the shanks reduced in length and fitted with thicker and wider tangs, thus insuring a strong drive.

Size	1 to 2	1 to 3	2 to 3	2 to 4	3 to 4
Hole Taper No	1	1	2	2	3
Shank Taper No	2	3	3	4	4
Length, Inches	3 %	3 15	4 75	4 7/8	5 %
Weight Each, Lbs.	1/5	36	3/5	1	46
Each		2.40	2.40	3.00	3.00
Size		3 to 5	4 to 5	4 to 6	5 to 6
Hole Taper No		3	4	4	5
Shank Taper No		5	5	6	6
Length, Inches		6 1/8	6 %	8 %	8 %
Weight Each, Lbs.		2 %	2 1/2	6 1/8	5 1/4
Each		\$4.40	4.40	10.00	10.00
		2 %	2 1/2	6 1/8	5 1/4

Gauges for fitting drills with broken tangs, furnished to order,

#### USE-EM-UP



No. 100-For Taper Shank Tools

By grinding a flat on the broken shank of a taper shank drill, it can be used up the same as if it had not been broken.

Size	1 to 2	1 to 3	2 to 3	2 to 4	3 to 4	4 to 5
Hole Taper No	1	1	2	2	3	4
Shank Taper No.	2	3	3	4	4	5
Wt. Each, Lbs	1/6	1/2	2/5	1	7/8	2 1/2
Each	\$1.80	2.40	2.40	3.00	3.00	4.40

## DRILL SOCKETS

#### MORSE



No. 201—For Taper Shank Tools

Size	1 to 2	1 to 3	1 to 4	1 to 5	2 to 3	2 to 4
Hole Taper No	1	1	1	1	9	9
Shank Taper No.	2	3	4	5	3	4
Shank Taper No. Length, Inches.	6 1/8	6 %	7 %	9 16	7 1/4	8 1/4
Wt. Each, Lbs	84	1.14	2 14	5 1/6	1 1/4	2 14
Each	\$2.00	2.50	3.20	4.80	2.50	3.20
Size	2 to 5	3 to 2	3 to 3	3 to 4	3 to 5	4 to 3
Hole Taper No	2	3	3	3	3	4
Shank Taper No.	5	2	3	4	5	3
Length, Inches	9.34	7 %	8 3%	9 3%	10%	9.36
Wt. Each, Lbs.,	5 1/2	1 %	1 %	2 5%	6 1/4	3 1/4
Each	\$4.80	3.20	3.20	3.20	4.80	4.80
Size	4 to 4	4 to 5	4 to 6	5 to 4	5 to 5	5 to 6
Hole Taper No	4	4	4	5	5	5
Shank Taper No.	4	5	6	4	5	6
Length, Inches	10%	11 %	1476	1111	1213	1356
Wt. Each, Lbs	4 1/3	6	15%	8 14	10	15 36
Each	\$4.80	4.80	12.00	12.00	12.00	12.00



No. 231-For Short Shanks

Size 1 to 2	1 to 3	2 to 3	2 to 4	3 to 4
Hole Taper No 1	1	2	2	3
Shank Taper No 2	3	3	4	4
Length, Inches 6 1/8	6.7%	7 1/8	8 1/6	9 1/4
Weight Each, Lbs. %	1 1/4	1 1/6	2 1/4	2 %
Each \$2.00	2.50	2.50	3.20	3.20
Size	3 to 5	4 to 5	4 to 6	5 to 6
Hole Taper No	3	4	4	5
Shank Taper No	5	5	6	6
Length, Inches	10 %	115%	14	15 1/2
Weight Each, Lbs	6 1/3	6	15 1/2	15 1/2
Each			12.00	

Short Shank Sockets are for use with drills on which the original tangs have been broken, the shanks reduced in length and fitted with thicker and wider tangs, thus insuring a strong drive. Gauges for fitting drills with broken tangs to Short Shank Sockets can be furnished on receipt of order.

Shank is Morse Standard Taper. Hole only is for Short Shanks.

## USE-EM-UP



No. 100A-For Taper Shank Tools

Drills with broken or twisted tangs can be used up by grinding a flat on remaining portion to fit the socket.

Size	1 2 %	1 to 3 1 3 11/4 2.50	2 to 3 2 3 1½ 2.50
Size Hole Taper No	2 4 2 1/4	3 to 4 3 4 2 34 3 . 20	4 to 5 4 5 6 1/4 4 . 80

As long as there is three-fourths of an inch of the shank left, it can be used in a Use-Em-Up socket,

# DRILL SOCKETS

MORSE



No. 200-For Taper Shank Tools

Plugs are furnished with these sockets for turning shanks.

Size 1	2	3
Hole Taper No 1	2	3
Hole Taper No	1 3/4	1 1/2
Shank Diameter, Inches. 175		5 %
Shank Length, Inches 4	4 14	
Holds Drills, Inches ¼ to %	8% to 88	52 to 1 1/4
Length, Inches 7	8	10
Each \$1.20	1.80	2.50
Size 4	5	6
Hole Taper No 4	5	6
Shank Diameter, Inches. 2	2 %	3 %
Shank Diameter, Inches	9	12%
Shank Length, Inches 6%	2 Jr to 3	3 to 6
Holds Drills, Inches 1 1 to 2		22
Length, Inches 12	16	14.00
Each \$4.00	7.50	14.00



No. 230-For Short Taper Shanks

Plugs are furnished with these sockets for turning shanks.

Size	2 2 1 ¼ 4 ¼	3 3 1½ 5%
Holds Drills, Inches ¼ to 16	81 to 88	88 to 1 1/4
Length, Inches	1.80	2.50
Size	5 5	6 6
Shank Diameter, Inches. 2	2 %	3 %
Shank Length, Inches 6%	9	1234
Holds Drills, Inches 15 to 2	2 to 3	3 to 6
Length, Inches	$\frac{16}{7.50}$	14.00

## OIL DRILL SOCKETS



No. 221-Taper Shank

Size	1 to 2	1 to 3	2 to 3	2 to 4	3 to 4	4 to 5
Hole Taper No	1	1	2	2	3	4
Shank Taper No.	2	3	3	4	4	5
Length. Inches	6 1/8	6 %	7 1/2	8 1/2	9 %	11%
Each	\$4.50	4.50	5.50	6.75	7.00	10.00



No. 220-Blank End

Size 1	2	3
Hole Taper No 1	2	3
Shank Diameter, Inches. 116	11/4	11/2
Shank Length, Inches 4	4 1/4	5 %
Holds Drills, Inches 1/4 to 1/8	27 to 38	22 to 114
Length, Inches 7	8	10
Each \$4.00	5.00	6.50
Size	4	5
Hole Taper No	4	5
Holds Drills, Inches	127 to 2	2 1 to 3
Shank Diameter, Inches	2	2 %
Shank Length, Inches	6 %	9
Length, Inches	12	16
Each	\$9.25	10.25

# DRILL DRIFTS

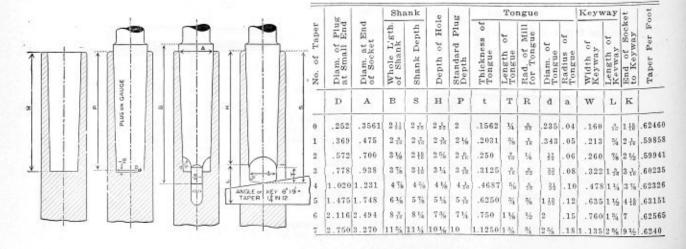
MORSE



No. 210-Drop Forged Steel, Finished and Hardened

Size	1	2	3	4	5	6
For Sl've or Socket No.	1	2	3	4	5	6
Each				.50	.60	.75

# MORSE TAPERS



# TWIST DRILLS MORSE TAPER SHANK





No. 302—Carbon Steel

Diam., Inches	Carbon Steel Each	Length, Inches	Twist Cut, Inches	Decimal Equiv- alent	Taper Shank	Diam., Inches	Carbon Steel Each	Length, Inches	Twist Cut, Inches	Decimal Equiv- alent	Tape Shan
1/6 2/2 2/2 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4	\$0.45 .45 .45 .50 .50	5 1/4 5 1/4 5 3/4 5 1/4 5 3/4 5 3/4	2 178 2 178 2 178 2 178 2 178 2 188 2 188 2 78	.125 .1406 .1562 .1718 .1875 .2031		1 55 1 55 1 75 1 55 1 55 1 55 1 55 1 55	\$4.75 5.00 5.00 5.25 5.25 5.50 5.50	11 % 12 12 12 ½ 12 ½ 12 ½ 12 ½	7 1/4 7 9/8 7 9/8 7 1/6 7 1/6 7 1/6	1.1562 1.1718 1.1875 1.2031 1.2187 1.2343 1.25	No. 3
· · · · · · · · · · · · · · · · · · ·	.60 .60 .65 .65 .70 .70 .75 .75 .80 .80 .90 1.00 1.10 1.10 1.20 1.30 1.30 1.40	644 644 664 664 664 664 67 77 77 77 77 77 88 84 84	3 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4	. 2343 .25 .2656 .2812 .2968 .3125 .3281 .3437 .3437 .3493 .375 .4962 .4218 .4375 .4531 .4687 .4843 .5 .5156 .5312 .5468 .5625	No. 1	11111111111111111111111111111111111111	5.75 5.75 6.00 6.00 6.25 6.50 7.00 7.50 8.00 8.00 8.50 9.00 9.50 9.50 9.50 9.50	14% 14% 144% 144% 144% 144% 1444 1444 1	8 1/2 8 1/2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1.2656 1.2812 1.2968 1.3125 1.3281 1.3437 1.3593 1.375 1.3906 1.4062 1.4218 1.4218 1.4375 1.4687 1.4687 1.5156 1.5156 1.5312 1.5468 1.5625 1.5781 1.5781	No. 4
10 10 10 10 10 10 10 10 10 10 10 10 10 1	1.50 1.60 1.60 1.70 1.70 1.80 1.90 2.00 2.10 2.20 2.20 2.20 2.20	8 14 8 34 8 34 9 14 9 14 9 14 9 14 9 14 9 16 9 16 10 10	4 95 4 4 7 7 7 8 1 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 6 6 6 6 6	.5781 .5937 .6093 .625 .6406 .6562 .6718 .6875 .7031 .7187 .7343 .75 .7656 .7812 .7968 .8125 .8281 .8437	No. 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10.50 10.50 11.00 11.00 11.50 12.00 12.50 12.50 12.50 14.75 14.00 14.75 15.50 16.25 17.00 17.75	15% 15% 15% 15% 15% 15% 16 16 16 16 16 16 16 16 16 16 16 16 16	9 % 9 % 9 % 9 % 10 % 10 % 10 % 9 15 9 15 10 % 10 % 10 % 10 % 10 % 10 % 10 % 1	1.6093 1.625 1.6406 1.6562 1.6718 1.6875 1.7031 1.7187 1.734 1.75 1.7812 1.8125 1.8437 1.8437 1.9062 1.9375	
2/8 244 and	2.40 2.60 2.60 2.80 2.80	10 1/4 10 1/2 10 1/2 10 5/8 10 5/8	6 % 6 % 6 % 6 % 6 %	.8593 .875 .8906 .9062		2 32 2 16 2 33 2 16 2 35 2 35	19.25 20.00 20.75 21.50 22.25	16 ½ 17 17 17 17	9 ½ 10 10 10	2.0312 2.0625 2.0937 2.125 2.1562	
11111111111111111111111111111111111111	3.00 3.00 3.25 3.25 3.50 3.75 4.00 4.25 4.25 4.50 4.75	10 % 10 % 10 % 10 % 11 11 11 11 11 11 11 11 11 11 11 11 1	66444844484448444484444444444444444444	.9218 .9375 .9531 .9687 .9843 1. 1.0156 1.0312 1.0468 1.0625 1.0781 1.0937 1.1093 1.125	No. 3	2222222344% 11% 11 2222222222222222222222222222222	23.25 23.00 23.75 24.50 26.00 27.50 29.00 30.50 32.00 34.00 38.00 40.50 43.00 45.50	17 17 1/2 17 1/2 17 1/2 18 1/2 19 1/2 19 1/2 20 1/2 20 1/2 21 22	10 10 % 10 % 10 % 10 % 11 % 11 % 11 % 11	2.1875 2.2187 2.25 2.3125 2.375 2.4375 2.5625 2.625 2.625 2.6875 2.75 2.8125 2.875 2.9375	No. 5

Note-For Drills with Special Size Shanks, See Page 5.

MORSE TAPER SHANK



No. 1302-High Speed Steel

				No. 13	302—High	i Speed St	cel				
Diam., Inches	High Speed Steel Each	Length, Inches	Twist Cut, Inches	Decimal Equiva- lent	Taper Shank	Diam., Inches	High Speed Steel Each	Length, Inches	Twist Cut, Inches	Decimal Equiva- lent	Taper Shank
A THE SECOND SEC	\$0.90 90 90 90 90 90 1.00 1.10 1.20 1.30 1.30 1.40 1.50 1.50 1.65 1.75 1.75 1.90 1.90	55555666666666677777777777777777777777	111222222222333333333344	.125 .1406 .1562 .1718 .1875 .2031 .2187 .2343 .25 .2656 .2812 .2968 .3125 .3281 .3487 .3593 .375 .3906 .4062 .4218 .4375 .4531 .4687	No. 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 8.99 9.50 9.50 10.15 10.75 10.75 11.50 12.25 13.00 13.75 14.65 14.65 15.50 16.40 17.25 17.25	123 133 133 133 133 134 144 144 144 144 14	7777777888888888	$\begin{array}{c} 1.1562\\ 1.1718\\ 1.1875\\ 1.2031\\ 1.2343\\ 1.25\\ 1.2656\\ 1.2812\\ 1.2968\\ 1.3125\\ 1.3281\\ 1.3437\\ 1.3593\\ 1.375\\ 1.3593\\ 1.375\\ 1.4062\\ 1.4218\\ 1.44218\\ 1.4531\\ 1.4687\\ 1.4687\\ 1.4843\\ 1.5\\ \end{array}$	No. 4
	2.00 2.00 2.15 2.15 2.25 2.25 2.40 2.50 2.75 2.75 3.00 3.25 3.25 3.50 3.75 3.75	84444444444444444444444444444444444444	44444444445555555566	.4843 .5 .5156 .5312 .5468 .5625 .5781 .5937 .6093 .625 .6406 .6562 .6718 .6718 .7031 .7187 .7343 .75	No. 2	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	18.15 19.00 19.00 20.00 20.00 21.00 21.00 22.00 23.00 23.00 24.00 24.00 25.00 25.00 26.25 27.50 28.75	166% 166% 166% 166% 1777 1776 1776 1776	9%% 95% 10 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	1.5156 1.5312 1.5468 1.5625 1.5781 1.5937 1.6093 1.625 1.6406 1.6562 1.6718 1.6875 1.7031 1.7343 1.75 1.7812 1.7812 1.8437	
** *** *** *** *** *** *** *** *** ***	$\begin{array}{c} 4.00 \\ 4.00 \\ 4.40 \\ 4.40 \\ 4.75 \\ 4.75 \\ 5.15 \\ 5.50 \\ 5.50 \\ 5.90 \\ 6.25 \\ 6.25 \\ 6.75 \\ 6.75 \\ 7.25 \\ 7.25 \end{array}$	10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 %	66.66.66.66.66.66.66.66.66.66.66.66.66.	.7968 .8125 .8281 .8437 .8593 .875 .89062 .9062 .9375 .9531 .9687 .9843 1.0156 1.0312 1.0468 1.0625	No. 3	2 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	31.25 32.50 33.75 35.00 36.25 37.50 38.75 40.00 41.25 42.50 43.75 45.00 50.00 60.00 65.00 70.00 75.00	17 17 17 17 17 17 17 17 17 17 17 17 17 1	10% 10% 10% 10% 10% 10% 10% 10% 10% 10%	1.875 1.9062 1.9375 1.9687 2.0312 2.0625 2.0937 2.125 2.1562 2.2187 2.25 2.375 2.375 2.4375 2.5625 2.6625	No. 5
1 % 1 % 1 % 1 % 1 %	7.75 7.75 8.25 8.25 8.90	$\begin{array}{c} 12\ \frac{1}{2}\\ 12\ \frac{1}{2}\\ 12\ \frac{3}{4}\\ 12\ \frac{3}{4}\\ 12\ \frac{3}{4}\\ 12\ \frac{7}{4}\\ \end{array}$	6 76 6 78 7 36 7 36 7 34	1.0781 1.0937 1.1093 1.125 1.1406	No. 4	2 11/2 2 34/2 11/2 76/8 2 11/2 3	80.00 85.00 90.00 95.00 100.00	20 % 20 % 21 % 21 % 21 % 21 %	12 % 12 % 13 ¼ 13 ¼ 13 % 13 %	2.6875 2.75 2.8125 2.875 2.9375 3.	

Note-For Drills with Special Size Shanks See Page 5.

MORSE TAPER SHANK



# SHANKS LARGER THAN REGULAR

No. 303—Carbon Steel

Diam., Inches	Each	Length, Inches	Twist, Inches	Taper	Diam., Inches	Each	Length, Inches	Twist,	Taper Shank	Diam., Inches	Each	Length, Inches	Twist, Inches	Taper
16	\$1.40	6 1/2	2 %	7	59	\$2.50	9 1/2	4 %	1	11/6	\$5.40	12	6 3%	1
81	1.40	6 34	2 7/8		54	2.50	9 1/2	4 7/8	7	1 2 4	5.60	121/4	6 %	
33	1.40	6 3/4	2 7/8	11 1	61	2.50	9.5%	5	4 4	1 5	5.60	12 14	6 %	
23	1.40	7	3 1/8		83	2.50	9.5%	5	1 1	111	5.80	12 1/2	6 %	7
3/4	1.40	7	3 1/8		43	2.60	9 34	5 1/8	1 1	1,3	5.80	121/2	6 %	No.
36 36 36	1.40	7 1/4	3 3%	1 12 1	11	2.60	9 %	5 1/8	1 1	113	6.00	12 %	7 1/8	No.
18	1.40	7 1/4	3 3/8		88	2.70	9.76	5 1/4	1 1	1 32	6.00	12%	7 1/8	1000
12 27 27	1.40	7 1/2	3 5%	Z.	33	2.70	9 76	5 1/4	1	119	6.20	13	7 %	
70	1.40	7 1/2	3 %	l o	41	2.80	10	5 %	1 I	1 14	6.20	13	7 %	
78 88 84	1.45	7 3/4	3 7/8	100	3/4	2.80	10	5 %	No		0.00	34.00	. /0	13
35	1.45	7 %	3 7/8		62	2.90	10 1/6	5 1/2	7.0	14%	13.25	161/2	9 %	
31	1.50	8	4 1/8		30	2.90	10 %	5 1/2	99	1 34	13.25	161/2	9 %	
81 1/2	1.50	8	4 1/8		81	3.00	10 1/4	5 %	1 1	188	14.00	16 1/2	9 5%	
81	1.60	8 1/4	4 1/8		18	3.00	10 1/4	5 %	1 1	113	14.75	16 1/2	9 5%	No.
35	1.60	8 1/4	4 3%		53	3.10	10 %	5 84	1 1	135	15.50	161/2	9 5%	9
89	1.70	8 1/2	4 %		35	3.10	10%	5 %	1 1	1 %	16.25	161/2	9 %	01
16	1.70	8 1/2	4.5%	30223	64	3.20	10 %	5 7/8	1 1	133	17.00	16 1/2	9 %	838.0
10			~	No.	78	3.20	10 1/2	5 7%	1 1	115	17.75	16 1/2	9 5%	
87	2.50	9 %	4 34		57	3.30	10 %	6		131	18.50	161/2	9 5%	
12	2.50	9 3%	4 %	C.5	39	3.30	10 %	6	k I	2	19.25	161/2	9 56	10

#### SHANKS LARGER THAN REGULAR

No. 1303-High Speed Steel

Diam., Inches	Each	Length, Inches	Twist, Inches	Taper Shank	Diam., Inches	Each	Inches Length,	Twist, Inches	Taper Shank	Diam., Inches	Each	Length. Inches	Twist, Inches	
3%	\$1.50	7 %	3 1/2		89	\$ 3.75	10 %	6	12	2 /2	\$43.75	19 18	10%	1
61	1.65	7 1/2	3 5%	9 /	35	3.75	10 %	6	10	2 1/4	45.00	19 18	10 %	
11	1.65	7 1/2	3 5/8	z				7	00	2 /6	50.00	19 11	10 %	114
87	1.75	7 %	3 7/8	1.0	1	6.25	12	6 3/8		2 %	55.00	19 13	10 %	11
70	1.75	7 34	3 7/8	to	1 2	6.75	12 1/6	6 1/2	Z	2 7	60.00	20 11	1114	11
20	1.90	8	4 1/8		1 22	6.75	12 1/8	6 1/2	0	2 1/2	65.00	20 11	1114	1 9
40	1.90	8	4 3/8	1	1 %	7.25	1234	6 5%	1 4	2 %	70.00	21 %	11 %	No.
		- S		84	116	7.25	121/4	6 %	1 3 7	2 5%	75.00	21 %	11 76	1
11	2.75	9 %	5 1/8	Υ	37.495.03	DESCRIPTION OF	20000	0.00	§ 4	2 11	80.00	22 %	1234	0.
21	2.75	9.34	5 1/8		2	35.00	19 13	1036	1 1	2 34	85.00	22 3	12%	
43	3.00	10	5 3/8		2 72	36.25	19 33	1034	1	2 13	90.00	22 13	13 14	
11	3.00	10	5 %	No	2 16	37.50	19 18	10 %	Z	2 7/8	95.00	22 11	13 14	
45	3.25	10 14	5 %	10	2 32	38.75	19 13	10 %	. 0	2 15	100.00	23 3	13%	
2.3	3 25	10 14	5 %	0.0	2 1/4	40.00	19 13	10%	6	3	105.00	23 %	13 %	
22	3.50	10 1/2	5 %		2 52	41.25	19	10 %			maries.	. Estable		20
34	3.50	10 1/4	5 3%		2 3	42.59	19 }}	10 %	)					



## SHANKS SMALLER THAN REGULAR

No. 1303A—High Speed Steel

Diam., Inches	Each	Length, Inches	Twist Inches	Taper Shank	Diam., Inches	Each	Length, Inches	Twist Inches	Taper Shank	Diam., Inches	Each	Length, Inches	Twist Inches	Taper
<del>21</del>	82.00	7 11	4 %	3	11/8	\$ 8.25	11%	7 1/8	1	1 33	\$22.00	1513	10 %	1
1/2	2.00	713	4 3%	1	1.2	8.90	11 %	7 14		157	23.00	15 12	10 3	
22	2.15	7 15	4 5%	Z	1 32	8.90	11 %	7 1/4		1 11	23.00	15 12	10 %	
11	2.15	7 15	4 5%	. 9	111	9.50	12	7 %	Z	149	24.00	15	10 %	
35	2.25	8 76	4 %	1	1 %	9.50	12	7.3%	0	133	24.00	16 %	10 %	
16	2.25				113	10.15	12 1/4	7 1/2	2.0	111	25.00	1634	10 %	
16	2.25	S 16	4 %		1 7 2	10.15	12 1/8	7 1/2	- 00	1 %	25.00	1614	10 16	12
		40	0.11								26.25	16 14	10 18	No.
£1	4.00	10	6 1/8		115	10.75	121/2	7.3%		133				135
18	4.00	10	5 1/8		11/4	10.75	12 1/2	7.7%	1	113	27.50	16 %	10 %	also.
55	4.40	10	6 1/8	7	100	0.00			1	1 3 2	28.75	16 %	10 16	1
32	4.40	10	6 1/8	No	133	18.15	15	9.3%		1 %	30.00	1636	10%	
55	4.75	10	6 1/8	C	135	18.15	15	9 3%		1 32	31.25	16 1/2	10%	1   1
3/4	4.75	10	6 1/8	1.0	135	19.00	15 14	9 5%	110000	115	32.50	16 %	10%	
554 /8 7-49 day	*5.15	10	6 1/6		1 70	19.00	15 1/4	9.5%	Z	133	33.75	16 %	10 %	
28	5.15	10	6 1/8		181	20.00	15%	9 15	200	2	35.00	16 %	10%	
52	0,10	- "	0 /8		138	20.00	1570	9 11	- de	_				1000
150	7.75	111/2	6 %	) Z	182	21.00	15 }}	10 %						1/2
	7.75		6 7/8	0	1 %	21.00	15 14	10 1	11/					
1 %		111/2		7			15 18	10 %	110					
124	8.25	11 %	7 1/6	J 60	131	22.00	19.15	10.48	J.					

MORSE STRAIGHT SHANK JOBBER'S LENGTH



No. 330-Carbon Steel

No. 1330-High Speed Steel

September 1	Per	Dozen					Per	Dozen	August and a second		
Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Twist, Inches	Decimal Equivalent	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Twist, Inches	Decimal Equivalent
70 14 - 15 14 15 15 17 18 18 18 18 18 18 18 18 18 18 18 18 18	\$1.50 1.55 1.60 1.65 1.70 1.75 1.80 1.85 1.90 2.00 2.25 2.50 2.75 3.00 3.25	\$5.70 5.70 5.70 5.90 6.10 6.10 6.30 7.00 7.35 7.35	111144 2114 214	\$144.5 1.4 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	.0312 .0468 .0625 .0781 .0937 .1093 .125 .1406 .1562 .1718 .1875 .2031 .2187 .2343	A SECTION OF THE SECTION OF A SECTION OF THE SECTIO	\$3.50 3.80 4.00 4.35 4.70 5.05 5.05 6.00 6.50 7.75 8.50 9.25 10.00 11.00 12.00	\$ 9.10 9.10 10.50 10.50 12.00 13.50 13.50 15.00 17.00 17.00 18.75 18.75 20.00 20.00	44444444444444444444444444444444444444	74 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.2656 .2812 .2968 .3125 .3281 .3437 .3593 .375 .3906 .4062 .4218 .4375 .4531 .4687 .4843

MORSE STRAIGHT SHANK TAPER LENGTH



No. 314-Carbon Steel

No. 1314—High Speed Steel

	E	ach					E	ach			
Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Twist, Inches	Decimal Equivalent	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Twist, Inches	Decimal Equivalent
						13	\$2.20	\$4.00	10	6.5%	.8125
1/8	80.45	80.90	5 1/4	2 1/2	.125	52	2.40	4.40	10 14	6 34	.8281
da	.45	.90	5 %	2 %	.1406	3%	2.40	4.40	10 1/4	6 34	.8437
20	. 45	.90	5 %	3	.1562	8.5	2.60	4.75	10 1/2	7	.8593
32 11	.50	.90	5 1/2	3 14	.1718	7/8	2.60	4.75	10 1/6	7	.875
A.	.50	.90	5 %	3 1/2	.1875	27	2.80	5.15	10%	7	.8906
13	.55	1.00	5 76	3 %	.2031	88	2.80	5.15	10 %	7	.9062
J.	.55	1.00	6	4	.2187	52	3.00	5.50	10 %	7	.9218
16 61 62 64 64	.60	1.10	6 1/4	4	.2343	15	3.00	5.50	1034	7	.9375
17	.60	1.10	6 1/4	4	.25	61 61	3.25	5.90	10 %	7 1/8	.9531
17	.65	1.20	6 14	4	.2656	31	3.25	5.90		7 1/8	.9687
8.8	.65	1.20		1	.2812	99	3.50	6.25	10 %		
32	.70	1.30	6 34	4 1	.2968	61		6.25	11	7 %	,9843
9.2			6 %	4 16		1	3.50		11	7 %	1.
1.9.	. 70	1.30	6.3%	4 16	.3125	1 47	3.75	6.75	111/4	र प्रवेष	1.0156
200 04 104 104 104 104	.75	1.40	6 1/2	4 1/8	.3281	1 1/2	3.75	6.75	111/8	7 %	1.0312
52	.75	1.40	6 1/2	4 1/8	. 3437	1 %	4.00	7.25	111/4	7 %	1.0468
0.0	.80	1.50	6 %	4.14	. 3593	1 %	4,00	7.25	1114	7.3%	1,0625
78	.80	1.50	6 %	4 1/4	.375	1.5	4.25	7.75	111/2	7.5%	1.0781
2.5	.90	1.65	7	4 %	.3906	1 3/2	4.25	7.75	111/2	7 %	1.0937
33	.90	1.65	7	4 %	.4062	1 77	4.50	8.25	11%	7 %	1.1093
64	1.00	1.75	7.1/4	4 %	.4218	1 1/8	4.50	8.25	1134	7 7/8	1.125
16	1.00	1.75	7.54	4 %	.4375	1 3	4.75	8.90	11 %	8	1.1406
22	1.10	1.90	7 1/2	4 7%	, 4531	1.5	4.75	8.90	11 %	8	1.1562
35	1.10	1.90	7 1/2	4 %	.4687	111	5.00	9.50	12	8 1/4	1.1718
	1.20	2.00	7.74	5	.4843	1.3	5.00	9.50	12	8 3/6	1.1875
1/2 20 10 10 10 10 10 10 10 10 10 10 10 10 10	1.20	2.00	7 34	5	. 5	111	5.25	10.15	12 1/4	8 1/8	1.2031
2.3	1.30	2.15	8	5 1/4	.5156	1 372	5.25	10.15	1234	8 1/8	1.2187
2.7	1.30	2.15	8	5 1/4	.5312	113	5.50	10.75	12 16	8 1/2	1.2343
25	1.40	2.25	8 14	5.8%	.5468	1 1/4	5,50	10.75	12 1/2	8 1/2	1.25
-Br	1.40	2.25	8 14	5.86	.5625	1 %	5.75	11.50	141%	9 1/8	1.2812
37	1.50	2.40	8 16	5.9%	.5781	1 /5	6.00	12.25	1434	9 14	1.3125
18	1.50	2.40	8 1/6	5 %	.5937	144	6.25	13.00	14%	9 3%	1.3437
4.5	1.60	2.50	8 34	5 34	.6093	1 34	6.50	13.75	14 1/2		1.375
56	1.60	2.50	8 34	5 84	.625	148	7.00	14.65		9 1/2	
61	1.70	2.75	9	5 1%	.6406	1 70	7.50	15.50	14 %	9 1/2	1.4062
31	1.70	2.75	9	5 %	.6562	1 15	8.00	16.40	14 %	9 %	1.4375
43	1.80	3.00	9 14	6	6718	1 1/2	8.50	17.25	14 %	9 %	1.4687
11	1.80	3.00	9 14	6	.6875			19.00	15	9 7%	1.5
44	1.90	3.25	9 16		.7031	1 %	9.50	21.00	15 1/4	9 3/4	1.5625
0.4	1.90	3.25		6 16 c 3		1 %	10.50		15 1/2	10	1.625
85 81	2.00	3.50	9.1/2	6 3	.7187	112	11.50	23.00	15%	1034	1.6875
61			9.34	6 %	. 7343	1 34	12.50	25.00	16	10 1/2	1.75
74	2.00	3.50	9 %	6.98	. 75	133	14.00	27.50	16 1/4	10%	1.8125
2.7	2.10	3.75	9 76	6 1/2	.7656	1 7/8	15.50	30.00	16 1/2	11	1.875
38	2.10	3.75	9.76	6 1/2	.7812	148	17.00	32.50	1.6 1/2	11	1.9375
51	2.20	4.00	1.0	6 %	.7968	2	18.50	35.00	16 1/2	11	2.

Note—Nos. 314 and 1314 Drills have shanks same size as point up to 1½ in.; 1% in. to 2 in. have shanks 1½ in. diameter, 4% in. long.

## MORSE STRAIGHT SHANK WIRE GAUGE



No. 340—Carbon Steel

No. 1340—High Speed Steel

	Per I	)ozen		ALCO THE REAL PROPERTY.			Per	Dozen			
No. by Gauge	Carbon Steel	High Speed Steel	Decimals of 1 Inch	Length, Inches	Twist, Inches	No. by Gauge	Carbon Steel	High Speed Steel	Decimals of 1 Inch	Length, Inches	Twist
1	\$2.75	\$7.00	.2280	4	2 5 1	41	\$1.70	85.70	.0960	2 %	1.5
2	2.75	7.00	,2210	3 18	2 5%	42	1.70	5.70	,0935	2 %	1 1/4
3	2.75	7.00	.2130	3 18	2 %	43	1.70	5.70	.0890	2 1/4	1 1/2
4	2.75	7.00	.2090	3 7/4	2 18	44	1.70	5.70	.0860	2 %	1 %
5	2.75	7.00	.2055	3 18	2 2	45	1.70	5.70	.0820	275	1 1/8
6	2.50	7.00	.2040	3 13	2 17	46	1.65	5.70	.0810	2 1/4	1 1/8
7	2.50	7.00	2010	3 34		47	1.65	5.70	605551555		
8	2.50				2 1/2	48	1.65	5.70	.0785	2 + a	1 32
9	2.50	7.00	.1990	3 11	2 1 2	0.77	1.65		.0760	$2\gamma_a$	116
		7.00	.1960	3 11	2 76	49		5.70	.0730	2	1
10	2.50	7.00	.1935	3 %	2 %	50	1.65	5.70	.0700	1 15	33
11	2.25	6.30	.1910	3 %	2 1 1	51	1.60	5.70	.0670	1 15	18
12	2.25	6.30	.1890	3 //4	2 %	52	1.60	5.70	.0635	1 %	76
13	2.25	6.30	.1850	3 1/2	2 %	53	1.60	5.70	.0595	1 10	85
14	2.25	6.30	.1820	3 75	2 1/4	54	1.60	5.70	.0550	1 1 2	37
15	2.25	6.30	.1800	3 76	2 72	- 55	1.60	5.70	.0520	1 34	1.8
16	2.00	6.30	.1770	3 3/8	2 %	56	1.55	5.70	.0465	1++	555
17	2.00	6.30	.1730	3 4	2 %	57	1.55	5.70	.0430	144	88
18	2.00	6.30	.1695	3 1/2	2 1/8	58	1.55	5.70	.0420	1 56	88
19	2.00	6.30	.1660	3 14	2 /2	59	1.55	5.70	.0410	1 %	55 15 15 56 56
20	2.00	6.30	.1610	3 16	216	60	1.55	5.70	.0400	1.78	11
21	1.90	6.10	,1590	3 %	216	61	1.50		.0390	1 16	56
22	1.90	6.10	.1570	3 1/8	2 16	62	1.50		.0380	1 1/2	56
23	1.90	6.10	.1540	3 10	1 8 %	63	1.50		.0370	1 1/2	54
24	1.90	6.10	.1520	3 10		64	1.50		.0360	1 36	78 56
25	1.90	6.10		3	115	65	1.50		.0350	1 1/2	5/
			.1495		1 3 3	100,000					78
26	1.80	6.10	.1470	2 18	1 76	66	1.50		.0330	1 1/2	16
27	1.80	6.10	.1440	2 13	1 3 5	67	1.50		.0320	178	16
28	1.80	6.10	.1405	2 %	143	68	1.50		.0310	1 18	5% 5% 5% 6% 6% 6% 6%
29	1.80	6.10	.1360	2 17	1 34	69	1.50		.0292	1 3/8	16
30	1.80	6.10	,1285	2 18	168	70	1.50		.0280	1 75	no.
31	1.75	5.90	.1200	2 %	111	71	1.50		.0260	1 70	1/2 1/3 3/8
32	1.75	5.90	.1160	2 11	1 %	72	1.50		.0250	1 1/4	16
33	1.75	5.90	.1130	2 11	1 %	73	1.50		.0240	$1\frac{3}{16}$	9/8
34	1.75	5.90	.1110	2 5%	1.%	74	1.50		.0225	1 1/8	16 14
35	1.75	5.90	.1100	2 %	1 16	75	1.50		.0210	115	1/4
36	1.75	5.90	.1065	2 18	1 1/2	76	1.50		.0200	1	1/4 5/2
37	1.75	5.90	.1040	2 1/2	1 1 1 1 1 1	77	1.50		.0180	18	3/2
38	1.75	5.90	.1015	2 7/4	1 3%	78	1.50		.0160	3/4	372
39	1.75	5.90	.0995	2 75	1 1 1 1	79	1.50		.0145	18	18
40	1.75	5.90	.0980	2 36	1 1 1 1	80	1.50		.0135	34	10

## MORSE STRAIGHT SHANK LETTER SIZES



No. 332-Carbon Steel

No. 1332—High Speed Steel

	Per I	Dozen	Decimal		55.3036	9 98	Per 1	Dozen	Decimal		1200200
Size by Gauge	Carbon Steel	High Speed Steel	Equiv- alent	Length, Inches	Twist, Inches	Size by Gauge	Carbon Steel	High Speed Steel	Equiv- alent	Length, Inches	Twist, Inches
A	\$3.00	87.35	. 234	3 12	2 13	N	\$4.25	\$10.50	.302	4 3/4	2 3 5
В	3.05	7.35	.238	3 12	2 18	0	4.40	10.50	.316	4.34	2 15
C	3.10	7.35	.242	3 13	2 18	P	4.60	12.00	.323	4 1/2	3 16
D	3.15	7.35	. 246	3 13	2 12	0	4.75	12.00	.332	4.5%	3 %
E	3.25	7.35	.250	3 15	2 %	R	5.00	12.00	.339	4 %	3 18
F	3.35	9.10	. 257	4 1/4	3	S	5.15	13.50	.348	4 34	3 13
G	3.45	9.10	. 261	4 1/4	3	T	5.30	13.50	.358	4 3/4	3 15
H	3.55	9.10	.266	4 1/4	3	U	5.50	13.50	.368	4 %	3 3 5
I	3.65	9.10	.272	4 1/4	3	v	6.00	13.50	.377	5	3 %
J	3.70	9.10	.277	4 1/4	3	w	6.50	15.00	.386	5	3 %
K	3.80	9.10	.281	4 1/4	3	X	6.75	15.00	.397	5 1/8	3 3/4
L	3.90	10.50	.290	4 14	2 8 1	Y	7.00	15.00	. 404	5 1/8	3 %
M	4.00	10.50	295	4 1/4	233	Z	7.25	17.00	. 413	5 1/4	3 37

# MORSE STRAIGHT SHANK, FOR WOOD



No. 360-Carbon Steel

Diameter, Inches	Per Dozen	Length, Inches	Twist. Inches
7 te 3 te 1/6 3 te	\$1.60 1.70 1.80 1.90	2 ½ 2 ¾ 3 3 3 ¼	$\begin{array}{c} 1\frac{1}{4} \\ 1\frac{1}{2} \\ 1\frac{1}{16} \\ 2\frac{3}{2} \end{array}$
10 11/4 11/4 11/6	2.25 2.75 3.25 3.80 4.35	3 ½ 3 ¾ 4 4 ¼ 4 ½	2 55 2 55 2 34 2 35 2 34 2 35 3 36
35 36 38 18 18 18	5.05 6.00 7.00 8.50 10.00	4 34 5 5 34 5 35 5 34	3 556 3 576 3 576 4 774 4 792
1/2 11 1 14 1 18 5/8	12.00 12.50 13.00 13.50 14.00	6 6 6 6	4 ½ 4 ½ 4 ½ 4 ½ 4 ½ 4 ½

#### MORSE CENTER



No. 440-Carbon Steel

Diam., Inches	Per Dozen	Length, Inches	Twist, Inches	Diam., Inches	Per Dozen	Length, Inches	Twist, Inches
32	\$1.50	1 1/4	5%	1 <sup>2</sup> € 10 10	\$2.25	1 1/2	1
32 रोड पोत सर्वेड	1.55 1.60 1.65	1 1/4	5/8 3/4	7 32 15	2.50 2.75 3.00	1 1/2	1
	1.70	11/4	34	1/4 1/4	3.25	1 1/2	1
52 84 1/8 64 82	1.80	1 1/4	34	32 12	3.80	1 1/2	1
82 82	1.90	1 1/2	1 1	1 <sup>5</sup> 4	4.35	1 1/2	1

## MORSE TRACK



No. 446—Carbon Steel

No. 1446-High Speed Steel

	Pe	r Dozen			Diam.	Decimal	
Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Twist, Inches	Shank, Inches	Equiv- alent	
3 <sup>2</sup> 2 3% 3%	\$3.80 6.00 6.00	\$ 9.10 13.50 13.50	3 3 3	1 3/4 1 3/4 1 3/4	20 20 36	.2812 .375 .375	

These drills are especially adapted for drilling rails for bonding work and are of a construction and temper guaranteed to give best results.

#### MORSE BIT STOCK



No. 390-Carbon Steel

Diameter, Inches	Per Dozen	Length, Inches	Twist, Inches	Shank to Point, Inches
在是是我们的是我是是不是我们的人,我们就是我们的人们的人们的人们的人们的人们的人们的人们的人们的人们的人们的人们的人们的人们	\$ 2.50 2.00 2.70 2.85 3.00 3.25 3.75 4.00 4.25 4.50 4.50 6.50 7.00 7.50 8.50 9.25 11.75 13.00 8.50 11.75 13.00 14.25 14.50 15.	3333334444555555555555666777777777777777	111112222233333333333444555555555555444444444	1112222223333444444444455555555555555555

Our Bit Stock Drills will fit any brace in the market, and will drill steel, iron or other metals as well as wood. They are not injured by contact with screws or nails, and will bore straight any kind of wood without splitting it.

For Sets of Bit Stock Drills, see page 15.

32d sizes not listed furnished at intermediate prices and 64ths sizes at price of next larger 32d size.

## TWIST DRILLS MORSE BLACKSMITHS



Style No. 2, with Flatted Shank.

No. 412—Carbon Steel No. 1412—High Speed Steel

For use in Silver and Deming and Prentice Blacksmith Drill Presses Nos. 1 and 2 Shanks 1/2 in. diameter, 21/2 in. long. If Round Shanks are desired specify Style No. 1, which are furnished at special prices.

	E	ach	1	1	1	Ea	ch	1	1	11	Fis	ach		
Diam., Inches	Steel	High Speed Steel	Length, Inches	Twist, Inches	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Twist, Inchés	Diam., Inches	the second secon	17 227 2	Length, Inches	Twist, Inches
1/8	\$0.45		5 1/8	2 16	10	\$1.10	\$2.05	6	2 %	1	\$2.50	\$4.10	6	2 %
1/2	. 45		5 %	2 75	13	1.20	2.20	6	2 %	1 1/2	2.60		6	2 34
10	.50		5 %	2 13	5%	1.30	2.30	6	2 %	115	2.70		6	2 34
10 10 10 14 14 10	. 55		6	3	31	1.40	2.40	6	2 3/4	1 32	2.80	+	6	2 34
1/4	. 60		6	3	11	1.50	2.50	6	2 34	1 1/8	2.90		6	2 %
52	. 65		6	2 3/4	23	1.60	2.65	6	2 34	1 1/2	3.00		6	2 %
Ye.	.70		6	2 3/4	34	1.70	2.75	6	2 34	176	3.10		6	2 34
33	.75		6	2 3/4	39	1.80	2.90	6	2 3/4	1 1/2	3.20		6	2 34
3/8	.80		6	2 3/4	18	1.90	3.00	6	2 3/4	1 1/4	3.30		6	2 34
3/8 13 3/2	. 85		6	2 3/4	55	2.00	3.15	6	2 34	1 %	3.60		6	2 %
3.6	.90		6	2 3/4	3/8	2.10	3.30	6	2 %	1 %	3.90		6	2 34
39	.95		6	2 3/4	23	2.20	3.50	6	2 34	1 70	4.20		6	2 34
1/2	1.00	\$1.75	6	2 3/4	18	2.30	3.70	6	2 3/4	1 1/2	4.50		6	2 %
17	1.05	1.90	6	2 34	33	2.40	3.90	6	2 3/4	2022	10.71.6196.00.0			-



Style No. 2, with Flatted Shank.

No. 418—Carbon Steel

For use in Coe's Blacksmiths' Drill Press and Prentice Drill Press No. 3, Shanks .647 in. exact diameter (about \$\frac{1}{2}\$ in.) and 2 \frac{1}{2}\$ in. long. If Round Shank is desired specify Style No. 1, which are furnished at special prices.

	E	ich	Vancus on visual	1	la second	Ea	ch	la constant	- September 1		E	ach		To Marion
Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Twist, Inches	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Twist, Inches	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Twist, Inches
1/8	\$0.50		4 %	2 16	78	\$1.20	\$2.05	6	3	1	\$2.50	84.10	6	3
1/2	. 55		5 1/8	2 7	12	1.25	2.20	6	3	1 12	2.60	4.30	6	3
3	.60		5 1/2	2 13	5%	1.30	2.30	6	3	110	2.70	4.50	6	3
32	. 65		5 %	3	81	1.40	2.40	6	3	1 32	2.80	4.75	6	3
1/4	.70		6	3	110	1.50	2.50	6	3	1 1/8	2.90	5.00	6	3
32	.75		6	3	33	1.60	2.65	6	3	1 32	3.00.	5.25	6	3
16	.80		6	3	34	1.70	2.75	6	3	1 10	3.10	5.50	6	3
11	. 85		6	3	35	1.80	2.90	6	3	1 72	3.20	5.80	6	3
32 3/8	.90		6	3	13	1.90	3.00	6	3	11/4	3.30	6.10	6	3
12	.95		6	3	27	2.00	3.15	6	3	1,%	3.60		6	3
76	1.00		6	3	7/8	2.10	3.30	6	3	1 3/8	3.90		6	3
15	1.05		6	3	22	2.20	3.50	6	3	170	4.20		6	3
16 14	1.10	\$1.85	6	3	15	2.30	3.70	6	3	1 1/2	4.50		6	3
3.5	1.15	1.95	6	3	31	2.40	3.90	6	3					2010

MORSE RATCHET



No. 400-Carbon Steel

No. 1400—High Speed Steel

Small Shank or No. 1. Size of Shank %x%x1½ in. This size Shank always furnished unless otherwise specified.

	Ea	ach				Ea	ch		1		Es	ich		1
Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Twist, Inches	Diam., Inches		High Speed Steel	Length, Inches	Twist, Inches	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Twist, Inches
1/8	\$0.90		43	1 13	12	\$1.40	\$3.10	6 1/2	4 1/4	113	\$2.85	\$6.00	9	6 11
22	.95		4 76	233	5%	1.40	3.20	6 1/2	4 1/4	1 32	3.00	6.30	9	6 11
	.95		411	2 3	31	1.45	3.30	6 1/2	4 %	1 1/8	3.10	6.70	9	611
16 32	1.00		418	235	11	1.45	3.40	6 1/2	4 %	1 3/2	3.25	7.00	9	611
14	1.00	\$2.50	5	276	23	1.50	3.50	6 1/3	4 1 6	175	3.35	7.30	9	6 11
32	1.05	2.55	5	2 %	34	1.55	3.65	6 1/2	4%	1 72	3.50	7.60	9	611
re .	1.10	2.60	5	2,2	3.5	1.65	3.80	6 34	478	11/4	3.65	7.90	9	611
11	1.15	2.65	5	2 34	13	1.75	4.00	7	411	1 2	3.75	8.25	9	6 11
3/8	1.20	2.70	6	3 34	27	1.90	4.20	734	418	.1 %	3.90	8.60	9	611
11	1.25	2.75	6 1/4	4	7/8	2.05	4.50	7 1/2	5 %	133	4.05	9.00	9	611
16	1.25	2.80	6 1/4	4	89	2.20	4.70	7 34	5 7 6	1 %	4.20	9.40	9	611
15	1.30	2.85	6 1/4	4	18	2.30	5.00	8	5 14	113	4.35	9.80	9	611
1/2	1.30	2.90	6 1/2	4 1/4	31	2.40	5.25	8 1/4	515	176	4.50	10.20	9	611
12	1.35	2.95	6 1/2	4 1/4	1	2.55	5.50	8 1/2	675	133	4.65	10.60	9	611
18	1.35	3.00	6 1/4	4 34	1 %	2.70	5.75	8 34	6 7	1 1/2	4.80	11.00	9	611

When ordering Taper Square Shank Drills for Packer Ratchets please state Number of Ratchet and Name of Manufacturer. 64th sizes furnished at price of next larger size.

### STRAIGHTWAY DRILLS MORSE TAPER SHANK

No. 425—Carbon Steel



No. 1425-High Speed Steel

- 3	Eac	ch	1		11	Ea	ch	1			Ea	ch		
Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Taper Shank	Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Taper Shank	Diam. Inch.	Carbon Steel	High Speed Steel	Length, Inches	Taper Shank
(1) 東京 (1) 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	\$0.60 .65 .70 .75 .80 .90 1.10 1.20 1.20 1.40 1.50 1.70 1.70 1.70 1.90 2.00 2.20	\$1.10 1.20 1.30 1.40 1.50 1.65 1.75 1.90 2.15 2.25 2.40 2.50 2.75 3.00 3.25 3.50 3.75 4.00	6 6 6 6 6 7 7 7 7 8 8 8 8 8 8 8 8 8 8 8	No. 1.	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$2.40 2.60 2.80 3.25 3.75 4.00 3.75 4.25 4.55 5.25 5.50 5.75 6.00 6.25 6.25 6.25 6.25	\$4.40 4.75 5.50 6.25 6.75 7.25 8.25 8.25 8.90 9.50 10.15 11.50 12.25 13.00 13.75	10 ½ 10 ½ 10 ½ 10 ½ 10 ½ 10 ½ 10 ½ 11 ½ 1	No. 2, No. 3, No. 4.	Total (4 to 1 to	\$7.50 8.00 8.50 9.00 9.50 10.00 10.50 11.50 12.50 13.25 14.00 14.75 15.50 17.00 18.50	\$15.50 16.40 17.25 18.15 19.00 20.00 21.00 22.00 24.00 24.00 26.25 26.25 30.00 28.75 30.00 31.25 32.50 33.75 35.00	144 115 115 115 115 115 115 116 116 116 116	No. 4.

#### MORSE STRAIGHT SHANK, TAPER LENGTHS

No. 428—Carbon Steel



No. 1428-High Speed Steel

Sac 1	Eac	ch .		Length	1	Ea	ch	1	Length		Ea	ch		Y
Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Flute, Inches	Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Flute, Inches	Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Length Flute, Inches
他のでは、「日本のでは、「日本のでは、日本のでは、「日本のでは、「日本のでは、日本のでは、日本のでは、日本のでは、日本のでは、「日本のでは、」」 「日本のでは、「日本のでは、「日本のでは、「日本のでは、「日本のでは、」」 「日本のでは、「日本のでは、「日本のでは、「日本のでは、」」 「日本のでは、「日本のでは、「日本のでは、「日本のでは、」」 「日本のでは、「日本のでは、「日本のでは、」」 「日本のでは、「日本のでは、」」 「日本のでは、「日本のでは、」」 「日本のでは、「日本のでは、」」 「日本のでは、「日本のでは、」」 「日本のでは、「日本のでは、」」 「日本のでは、「日本のでは、」」 「日本のでは、「日本のでは、」」 「日本のでは、「日本のでは、」」 「日本のでは、」」 「日本のでは、「日本のでは、」」 「日本のでは、」」 「日本のでは、「日本のでは、」」 「日本のでは、」」 「日本のでは、」 「日本のでは、」」 「日本のでは、」 「日本のでは、」 「日本のでは、」 「日本のでは、」」 「日本のでは、」 「日本のでは、」 「日本のでは、」 「日本のでは、」 「日本のでは、」」 「日本のでは、」 「日本のでは、」」 「日本のでは、」 「日本のでは、日本のでは、「日本のでは、」 「日本のでは、」 「日本のでは、」 「日本のでは、日本のでは、「日本のでは、」 「日本のでは、」 「日本のでは、」 「日本のでは、」 「日本ので	\$0.60 .65 .70 .75 .90 1.00 1.10 1.20 1.30 1.40 1.60 1.70 1.80 1.90	\$1.10 1.20 1.30 1.40 1.50 1.65 1.75 1.90 2.00 2.15 2.25 2.40 2.50 3.25 3.50	SECTIONS STATES OF SECTIONS SE	THE STATE OF THE S	11111111111111111111111111111111111111	\$2.10 22.40 22.40 22.60 3.025 3.025 3.025 3.025 4.750 4.750 4.750 4.750 5.250	\$3.75 4.00 4.75 5.15 5.90 6.75 7.25 8.25 8.25 8.90 10.15	9 % 10 14 10 14 10 14 10 15 10 16 11 14 11 14 11 14 11 14 11 11 14 14	066677777777788888	**************************************	\$5.75 6.25.66.50 7.50 8.50 9.50 11.50 12.50 14.00 15.50 18.50	\$11.50 12.25 13.00 13.75 14.65 15.50 16.40 17.25 19.00 21.00 23.00 25.00 27.50 30.00 32.50 35.00	14 % 14 % 14 % 14 % 14 % 15 % 15 % 16 % 16 % 16 % 16 % 16 % 16	9%4 9%4 9%4 9%4 9%4 9%4 10%4 10%

#### THREE-GROOVE DRILLS MORSE TAPER SHANK

No. 450—Carbon Steel



No. 1450-High Speed Steel

	Eas	ch		Sans Lake	James 1	Eac	eh	1		1	Ea	eh	1	
Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Taper Shank	Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Taper Shank	Diam., Inch.		High Speed Steel	Length, Inches	Taper Shank
76.00 7.00 7.00 7.00 7.00 7.00 7.00	\$1.00 1.05 1.10 1.15 1.20 1.25 1.30 1.40	\$2.00 2.15 2.25 2.40 2.50 2.65 2.75 2.90	614 614 614 614 774 774	No. 1.	1 1/2 1 1/2 1 1/2 1 1/2 1 1/2 1 1/2 1 1/2 1 1/2 1 1/4	\$3.75 4.00 4.25 4.50 4.75 5.25 5.25	\$9.00 9.50 10.25 11.00 11.75 12.50 13.25 14.00	11 1/4 11 1/4 11 1/2 11 3/4 11 3/4 12 1/6 12 1/6	No. 3.	1 135 1 25 1 76 1 28 1 15 1 15 1 15 2	\$14.00 14.75 15.50 16.25 17.00 17.75 18.50	\$28.50 29.50 30.50 31.50 32.50 33.50 34.50	1614 1614 1614 1615 1616 1616	] No. +
100	1.50 1.60 1.70 1.80 1.90 2.00 2.10	3.00 3.15 3.25 3.50 3.75 4.00 4.25	8 14 8 14 8 14 9 14	]	1 % 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5.75 6.00 6.25 6.50 7.00 7.50	14.75 15.50 16.25 17.00 17.75 18.50	14 % 14 % 14 % 14 % 14 % 14 %		20 15 15 15 15 15 15 15 15 15 15 15 15 15	19.25 20.00 21.50 23.00 24.50 26.00 27.50	36.00 37.50 40.50 43.75 47.50 52.50 60.00	161/2 17 17 17 171/2 171/2	
100.79 Bank 10.79 Bank 10.70 Bank	2.25 2.40 2.55 2.70 2.85 3.00 3.15	4.65 5.00 5.40 5.75 6.15 6.50 7.00	9 1/2 9 1/2 9 1/3 10 1/4 10 1/4 10 1/4	No. 2.	1 45 1 45 1 45 1 45 1 45 1 45 1 45 1 45	8.00 8.50 9.00 9.50 10.00 10.50 11.00 11.50	19.25 20.00 20.75 21.50 22.25 23.00 23.75 24.50	14% 15 15 15¼ 15¼ 15½ 15%	No. 4.	1012121212121212121 10121212121212121212	29.00 30.50 32.00 34.00 36.00 40.50 43.00	65.00 70.00 76.25 82.50 88.75 95.00 102.50	18½ 19 19¼ 19¼ 20 20¼ 20¼	No. 5.
1 12	3.30 3.45 3.60	7.50 8.00 8.50	10 34 10 36 11	No. 3	1 88 1 84 1 89	12.00 12.50 13.25	25.50 26.50 27.50	15 % 16 16		3 18	43.00 45.50 48.00	110.00 117.50 125.00	21 21 22	)

It is considered advisable to use two drills when large holes are to be made in solid stock, first using a two-groove drill and following through with a three or four-groove drill.

A two-groove drill should not be used in cored holes or to follow another drill.

The points of the three and four-groove drills show that they are not to be used for drilling solid stock but for enlarging a hole already made

## THREE-GROOVE DRILLS MORSE STRAIGHT SHANK

No. 452—Carbon Steel



No. 1452—High Speed Steel.

	Es	ich		E .	E	ach			E	ach:			E	ach	
Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Diam., Inches	Carbon Steel		Length Inches
14 22 15 16 16 16 16 16 16 16 16 16 16 16 16 16	\$1.00 1.05 1.10 1.15 1.20 1.25 1.30 1.40 1.50 1.60 1.70 1.80 1.90 2.00 2.10	\$2.00 2.15 2.25 2.40 2.50 2.65 2.75 2.90 3.00 3.15 3.25 3.50 3.75 4.00 4.25	66666777788888994	2014 4 401 21 12 12 12 12 12 12 12 12 12 12 12 12	\$2.25 2.40 2.55 2.70 2.85 3.00 3.15 3.30 3.45 3.60 3.75 4.00 4.25 4.50	\$ 4.65 5.00 5.40 5.75 6.15 6.50 7.00 7.50 8.50 9.00 9.50 10.25 11.00	9 3/4	1 And	\$ 4.75 5.00 5.25 5.50 6.00 6.25 6.50 7.00 7.50 8.00 9.00 9.50	\$11.75 12.50 13.25 14.00 14.75 15.50 16.25 17.00 17.70 18.50 19.25 20.00 20.75 21.50	11 % 12 % 12 % 12 % 14 % 14 % 14 % 14 %	1 1 5 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$10.00 10.50 11.00 11.50 12.00 12.50 13.25 14.00 14.75 15.50 16.25 17.00 17.75 18.50	\$22.25 23.00 23.75 24.50 25.50 26.50 27.50 28.50 29.50 30.50 31.50 32.50 34.50	15 ¼ 15 ½ 15 ½ 15 ½ 15 ¾ 16 16 ¼ 16 ½ 16 ½ 16 ½ 16 ½ 16 ½ 16 ½ 1

# FOUR-GROOVE DRILLS MORSE TAPER SHANK

No. 454—Carbon Steel



No. 1454—High Speed Steel

100	E	ach	7	Morse		E	ach	and the same	Morse		E	ach		Morse
Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Taper Shank	nk Inches	Carbon Steel	High Speed Steel	Length, Inches	Taper Shank	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Taper
1/2 12 13 14	\$1.50 1.60 1.70	\$ 3.00 3.15 3.25	7 % 8 8 %	} No. 1	1 % 1 % 1 %	\$ 5.00 5.25 5.50	\$12.50 13.25 14.00	12 12 1/8 12 1/2	No. 3	1 76 188 118	\$15.50 16.25 17.00 17.75	\$30.50 31.50 32.50 33.50	16 1/2 16 1/2 16 1/2	No.
19 5/8 5/8 20 116 23	1.80 1.90 2.00 2.10 2.25	3.50 3.75 4.00 4.25 4.65	8 1/4 8 1/4 9 1/4 9 1/4	z	1 % 1 % 1 % 1 % 1 %	5.75 6.00 6.25 6.50 7.00	14.75 15.50 16.25 17.00 17.75	14 1/4 14 1/4 -14 3/4 14 1/2 14 5/8		2 1/2 2 1/2 2 1/6 2 1/6	19.25 20.00 21.50	36.00 37.50 40.50	16 1/2 16 1/2 17 17	)-
10 15 - 10 14 10 10 10 10 10 10 10 10 10 10 10 10 10	2.40 2.55 2.70 2.85 3.00	5.00 5.40 5.75 6.15 6.50	9 % 9 % 10 10 % 10 %	0. 2	1 15 1 15 1 16 1 16 1 16	7.50 8.00 8.50 9.00 9.50	18.50 19.25 20.00 20.75 21.50	14 ¾ 14 % 15 15 15 ¼	No.	2 % 2 % 2 % 2 % 2 % 2 % 2 % 2 % 2 % 2 %	23.00 24.50 26.00 27.50 29.00	43.75 47.50 52.50 60.00 65.00	17 17 16 17 16 18 18 16	7
18 31 1	3.15 3.30 3.45 3.60	7.00 7.50 8.00 8.50	10 % 10 % 10 %	Z	158 156 181 116 168	10.00 10.50 11.00 11.50 12.00	22.25 23.00 23.75 24.50 25.50	15 ½ 15 ½ 15 ½ 15 ¾ 15 ¾	+	2 ½ 2 % 2 % 2 16 2 %	30.50 32.00 34.00 36.00 38.00	70.00 76.25 82.50 88.75 95.00	19 19 ¼ 19 ½ 20 20 ½	No. 5
1 ½ 1 ½ 1 ½ 1 ½ 1 ½	3.75 4.00 4.25 4.50 4.75	9.00 9.50 10.25 11.00 11.75	11 % 11 % 11 % 11 % 11 %	Io. 3	1 %4 1 3 5 1 1 8 5 1 3 5 1 3 5	12.50 13.25 14.00 14.75	26.50 $27.50$ $28.50$ $29.50$	16 16 16¼ 16¼ 16¼		2 18 2 76 2 15 3	40.50 43.00 45.50 48.00	102.50 110.00 117.50 125.00	20 ½ 21 21 22 22	

## FOUR-GROOVE DRILLS MORSE STRAIGHT SHANK TAPER LENGTH

No. 456-Carbon Steel



No. 1456-High Speed Steel

	Ea	teh			E	ach			E	ach			E	ach	
Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches
1/2 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	\$1.50 1.60 1.70 1.80 1.90 2.00 2.10 2.25 2.40 2.55 2.70	\$3.00 3.15 3.25 3.50 3.75 4.00 4.25 4.65 5.00 5.40	7% 8 8 % 8 % 9 % 9 % 9 % 9 %	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3.30 3.45 3.60 3.75 4.00 4.25 4.50 4.75 5.00 5.25	\$ 7.00 7.50 8.00 8.50 9.00 9.50 10.25 11.00 11.75 12.50 13.25	10 % 10 % 11 11 % 11 % 11 % 11 % 11 % 12 %	1 % 1 % 1 % 1 % 1 % 1 % 1 % 1 % 1 % 1 %	\$5.75 6.00 6.25 6.50 7.00 7.50 8.00 8.50 9.00 9.50	15.50 16.25 17.00 17.75 18.50 19.25 20.00 20.75 21.50 22.25	14 ½ 14 % 14 % 14 % 15 15 15 ¼ 15 ¼	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$11.00 11.50 12.00 12.50 13.25 14.00 14.75 15.50 16.25 17.00 17.75	24.50 25.50 26.50 27.50 28.50 29.50 30.50 31.50 32.50 33.50	15% 15% 16 16% 16% 16% 16% 16%
25 76	2.85 3.00	6.15	10 1/4	1 1/4	5.50	14.00	12 1/2	1 %	10.50	23.00	15 1/2	2	18.50	34.50	16 1/2

# OIL HOLE DRILLS

MORSE TAPER SHANK





For End Lubrication

No. 473—Carbon Steel.

No. 1473-High Speed Steel

For Side Lubrication

No. 474-Carbon Steel.

No. 1474-High Speed Steel

		7.0	1		I.	-	-		1	1	1
Talle and	Ea	1	Longth	Twist,	Taper	To.1	Ea	ch	Langth	Twist.	m
Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Inches	Shank	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Inches	Taper Shank
%6 85 85 85 85 85 85 85 85 85 85 85 85 85	\$3.00 3.15 3.15 3.30 3.30		6 % 7 7 7 % 7 %	3 16 3 16 3 16 3 16 3 16 3 16 3 16		1 27 1 32 1 32 1 34	\$8.40 8.40 8.70 8.70		12 1/6 12 1/6 12 1/2 12 1/2	7 ½ 7 ½ 7 % 7 %	No. 3.
10 00 to 10 100 to 10 00 to 10	3.85 3.85 4.00 4.00 4.15 4.15 4.30		7 1/4 7 1/4 7 3/4 7 3/4 8 8 8 1/4 8 1/4	4 1 1 2 4 1 2 2 4 1 2 2 4 1 2 2 4 1 2 2 2 4 1 2 2 2 4 1 2 2 2 2	No. 1.	1	9.40 9.40 10.15 10.15 10.95 11.80 11.80 12.30		14 % 14 % 14 % 14 % 14 % 14 % 14 % 14 %	8 14 8 15 8 15 8 16 8 16 8 16 8 16 8 16 8 16 8 16 8 16	
	4.50 4.50 4.70 4.70 4.80 4.95 5.10 5.20 5.35 5.50 5.70 5.70 5.90 6.05 6.05	Prices upon Application	8888889999999999999999999999999999999	4.4.4.4.5.5.5.5.5.5.5.5.6.6.6.6.6.6.6.6.	No. 2.		12.20 12.85 12.85 13.35 13.35 14.00 14.20 14.20 14.20 14.70 15.00 15.35 15.70 16.10 16.50	Prices upon Application	14% 14% 14% 14% 155 155 155 155 155 155 155 155 155 15	9999999999999999999999999999999999999	No. 4.
報告報告報 战场战场战场战场战场战场战场战场	6.20 6.20 6.35 6.35 6.50 6.50 7.10 7.10 7.45 7.45 7.80 7.80 8.00 8.20 8.20		10 % 10 % 10 % 10 % 10 % 11 % 11 % 11 %	666666666677777774%%%%%%%%%%%%%%%%%%%%%	No. 3	1 % 24 COLAR CREATE	16.50 16.75 17.00 17.00 17.25 17.50 17.50 17.50 17.85 17.85 18.20 18.20 18.60 19.00		16 16 16 16 14 16 14	9 10 10 10 10 10 10 10 10 10 10 10 10 10	

These drills have holes through the solid metal and have great advantages over any other drill devised for conveying lubricants as well as air to the point. When drilling cast iron, air is sometimes used for blowing out the chips and keeping the drill cool.

<sup>\*</sup>These drills  $\frac{1}{2}$  and smaller are furnished with one oil hole only. They can be furnished with two if ordered, but at customer's risk.

# OIL HOLE DRILLS

#### MORSE STRAIGHT SHANK



No. 479-Carbon Steel

No. 1479—High Speed Steel

	Ea	ch	Laver	Sugar, and	13.0	Ea	ch		100
Diam. In.	Car- bon Steel	High Speed Steel	Lgth. In.	Twist In.	Diam. In.	Car- bon Steel	High Speed Steel	Lgth. In.	Twis
物经验器 不能证法 化基亚醇 化异亚醇异核 医医生物 医多种氏管 医普里氏氏管 医克里氏 医二氏试验检试验检试验检试验检验 **************************	\$3.3.3.8.850005530000044.15500000044.15500000000000000000	Prices upon applica	6777777888888888999999999990000000000000	4.4.4.4.4.4.4.5.5.5.5.5.5.5.5.5.5.5.5.5	11111111111111111111111111111111111111	\$8.20 8.40 8.40 8.70 9.40 10.15 10.95 11.80 12.30 12.30 12.85 13.35 14.00 14.20 14.20 14.40 14.70 15.35 15.70 16.50 16.75 17.25	Prices upon application	12222244444444444445555555555555566666666	88888899999999999999999999999999999999

\*These drills 33 and smaller are furnished with one oil hole only. They can be furnished with two if ordered, but at customer's risk.

These drills have holes through the solid metal and have great advantages over any other drill devised for conveying lubricants as well as air to the point. When drilling cast iron, air is sometimes used for blowing out the chips and keeping the drill cool.

#### MORSE EXTRA LONG STRAIGHT SHANK



No. 480—Carbon Steel

No. 1480—High Speed Steel

			Cach		8,	Twist, In	ches
Diam. In.	Length 836	Length 10½ In	Length 13 In.	High Speed Steel	Lgth. 8½ In.	Length 10 ½ In.	Lengti 13 In.
**************************************	1n. \$4.60 4.70 4.70 4.70 4.70 4.70 4.80 4.80 4.80 4.80 5.00 5.00 5.20 5.30 6.30 6.30 6.30 6.30 6.30 6.30 6.30 6	18. 30	5.90 6.00 6.10 6.10 6.20 6.20 6.30 6.40 6.50 6.30 6.40 7.20 7.10 7.20 7.40 7.10 7.20 7.40 7.10 7.20 7.40 7.10 7.20 7.40 7.10 7.20 7.40 7.20 7.40 7.20 7.40 7.20 7.40 7.20 7.40 7.40 7.40 7.40 7.40 7.40 7.40 7.4	Prices upon application	55555555555555555555555555555555555555	77777777777777777777776666666666666666	19999999999999999999999999999999999999

Drills 133 to 2 inches diameter, 8 ½ inches long, have shanks 1½ inches diameter, 3 inches long.

Drills 183 to 2 inches diameter, 10 ½ inches long, have shanks 1½ inches diameter, 3¼ inches long.

Drills 133 to 2 inches diameter, 13 inches long, have shanks 1 1/2 inches diameter, 3 1/2 inches long.



## SHELL DRILLS

#### MORSE

#### 15 Degree Angle Spiral, with Taper Holes

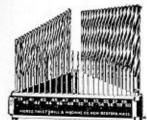
Shell Drills 111 in. to and including 31/2 in. have four flutes, 31/3 in. to and including 5 in. have six flutes.

Shell Drills take the same arbors as regular Shell Reamers. These arbors are illustrated on page 18.

No. 460—Carbon Steel

No. 1460—High Speed Steel

20	E	ach			20 9		ach	0 10	1202		E	ach		
Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Hole, Inches	Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Hole, Inches	Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Hole, inches
1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$5.10 5.40	\$9.75 10.50	3 ½ 3 ½	1	2 <del>11</del> 2 <del>34</del>	\$10.60 11.00	\$23.00 24.25	4 4	1 ½ 1 ½	3 % 3 <del>11</del>	\$17.80 18.40	\$53.50 56.50	5 5	2 2
1 18	5.70 6.00	11.25 12.00	3 1/2	1	2 18 2 76	11.40 11.80	25.50 27.00	4	1 ½ 1 ½	3 %	19.00 19.60	59.50 62.75	5	2 2
113	6.30	12.75 13.50	3 1/2	1	218	12.20 12.60	28.50 30.00	4 4	1 ½ 1 ½	3 % 3 ½	20.20	66.00 69.25	5	2 2
2 1/8	6.95 7.30	14.25 15.00	3 %	1 1/4	3 1/3	13.10 13.60	31.50 33.25	4 1/2 4 1/2	1 % 1 %	4 1/8	21.40 22.90	72.50 79.00	5 5 1/4	2 14
2 14	7.65 8.00	15.75 16.50	3 %	1 1/4	3 1/4	14.10 14.60	35.25 37.50	4 1/2 4 1/6	1%	4 1/4	24.40 25.90	85.50 92.00	5 ½ 5 ½	2 1/4
2 %	8.35	17.25 18.00	3 % 3 %	1 1/4	3 % 3 %	15.10 15.60	40.00 42.50	4 ½ 4 ½	1%	4 1/2 4 5/8	27.40 29.30	98.50 105.00	5 1/2	21/4
2 1/2 2 1/2	9.05	18.75 19.50	3 %	1 1/4	3 %	16.10 16.60	45.25 48.00	4 1/2 4 1/2	1%	4 %	31.20	111.50	6	2 1/2 2 1/2
2 %	9.80	20.50 21.75	4	11/4	3 16.	17.20	50.75	5	2 74	4 % 5	33.10 35.00	118.00 125.00	6	2 1/2



#### CARBON STEEL DRILLS IN SETS

## MORSE PORTABLE SETS

#### In Folding Metal Case

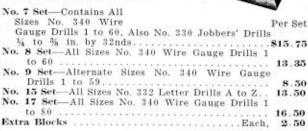
These cases are made of metal, nicely finished and are provided with holes for each size of drill, with sizes plainly marked so that there is no misplacing of drills and each size is available instantly.

1	12-	Per Set
No.	5B Set-Contains All Sizes No. 330 Jobbers'	
	Drills 1/4 to 1/4 in. by 64ths	816.00
No.	7B Set-Contains All Sizes No. 340 Wire Gauge	
	Drills 1 to 60, Also No. 330 Jobbers' Drills 1/4 to	
	% in. by 32nds	16.75
No.	8B Set-Contains All Sizes No. 340 Wire Gauge	
	Drills 1 to 60	14.35
No.	15B Set-Contains All Sizes No. 332 Letter	
	Drills A to Z	14.50

#### In Hardwood Blocks

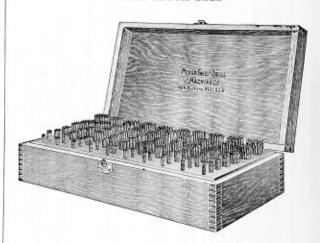
No. 5 Set-Contains All Sizes No. 330 Job-bers' Drills 16 to 1/2 in. by 64ths.....\$15.00

No. 6 Set-Contains All Sizes No. 330 Job-bers' Drills 16 to 1/2 in. by 32nds.....



Note-Above Drill Sets can be furnished in High Speed Steel if so desired. Price on request,

#### MORSE STOCK SETS



For Factory, Storeroom and Dealers Use

The case is strongly made of oak; outside dimensions, closed, are: length 19 in., width 10 ¼ in., height 5 in. The drills stand on end in holes of graduated sizes, 24 to each hole, 10 holes to a row and 7 rows of holes. This makes easy the selection of any size or quantity of drills.

Per Set No. 35 Set-Consists of 24 Straight Shank Wire Drills, Style 340, of Each Size from No. 1 to No. 70 Inclusive, Shipping Weight 32 Lbs... \$280.00

No. 36 Set-Consists of 24 Straight Shank Jobbers' Drills, Style 330, of Each Size  $\frac{1}{16}$  to  $\frac{2}{16}$  and 12 of Each Size 👬 to ½ in., Inclusive. The Case is of Oak, Similar in Style to Above, Outside Dimensions: Length 19 in., Width 10 1/4 in., Height 7 in., Shipping Weight 49 Lbs...... 197.50

## DRILLS IN SETS

Per Set

#### MORSE RADIO SETS



#### Practical Assortment for Radio Work

These sets contain the most practical assortments of straight shank drills, conveniently arranged with each size plainly marked for ready reference, packed in a durable container. These sizes will fit any ordinary hand drill chuck.

.NO.	Straight Shank Drills Each 16. \$\frac{1}{2}\$, \$\fra	\$1.60
No.	1 Set—Contains One Each No. 330 Jobbers' Straight Shank Drills Each $\frac{1}{10}$ , $\frac{3}{32}$ , $\frac{1}{16}$ , $\frac{3}{32}$ , $\frac{3}{16}$ , $\frac{3}{32}$ , $\frac{3}{16}$ , $\frac{3}{32}$ , $\frac{3}{16}$ , $\frac{3}{32}$ , $\frac{3}{16}$	2.50
No.	2 Set—Contains One Each No. 340 Wire Gauge Drill No. 10, 16, 20, 29, 36 and 45 Which Are the Proper Size Tap Drills for Nos. 4 to 14 Machine Screw Taps	

#### MORSE HANDY RADIO SETS



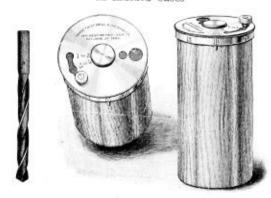
With Taps and Drills for Radio Work

Per Set

No. 3 Set—Contains One Each 4-36, 6-32, 8-32, 10-32, 12-24, 14-20 Machine Screw Taps and One Each No. 10, 16, 20, 29, 36 and 45 Wire Gauge Drills. \$2.00

#### MORSE STRAIGHT SHANK

In Indexed Cases



Drills are contained in holes arranged in concentric circles in the block. The cap is stamped with size of each drill. The swinging cover is moved by small knob so that its holes will register with the holes in the outer cover on cap. The cap is turned to bring any size in line with the index mark so that by inverting the case, size drill selected will drop out,

	Per Set
No. 5A-With No. 330 Jobbers' Straight Shank	
Drills 16 to 1/2 in, by 64ths	816.00
No. 6A-With No. 330 Jobbers' Straight Shank	
Drills 16 to 1/2 in. by 32nds	10.50
No. 7A-With No. 340 Wire Gauge Straight Shank	
Drills Size 1 to 20 and No. 330 Jobbers' Straight	
Shank Drills ¼ to % in. by 32nds	16.75
No. 8A-With No. 340 Wire Gauge Straight Shank	
Drills Sizes 1 to 60	14.35
No. 9A-With No. 340 Wire Gauge Straight Shank	na.er.
Drills 1 to 59 Alternate Sizes	9.50

#### MORSE BIT STOCK DRILL SETS

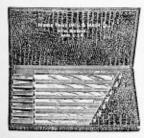


## In Round Wood Box

Complete with cover, nicely finished, size of each drill stamped on outside of case.

Per Set
No. 14 Set—Contains
One Each No. 390
Bit Stock Drills,
Each 10, 31, 16, 16,
and % in... \$4.25

# MORSE BIT STOCK DRILL SETS



#### In Flat Leatherette Cases

This Set is furnished in a leatherette case that is both neat and convenient for carrying. This case is 6 \% in. long, 3 \% in. wide, and \% in. thick. The sizes are plainly marked as shown in the illustration.

#### MORSE STRAIGHT SHANK JOBBERS

No. 601-Carbon Steel



No. 1601-High Speed Steel

	Ea	ch	Terra description	Length	Transaction and	Ea	gh		Length	Section 1	Ea	ch		Lengt
Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Flute. Inches	Diam Inch.	Carbon Steel	High Speed Steel	Length. Inches	Flate. Inches	Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Flute
1/8	\$1.00		3	1 1/2	33	\$2.40	\$6.75	7 %	3 11	1 /2	\$4.90	\$15.75	121/8	6 16
2/2	1.20		3 14	1.5%	116	2.40	6.75	7.34	3 7%	114	4.90	15.75	1214	6 1/8
1/2 1/2 1/2 1/2	1.20		3 1/2	1 %	20	2.60	7.25	8 1/8	4 16	1 %	5.20	17.25	12%	6 16
77	1.40		3 34	1 78	34	2.60	7.25	8 3/8	4 18	1 1/2	5.20	17.25	12 1/2	6 14
14	1.40	\$3.50	4	2	53	2.80	7.75	8 34	4 %	135	5.60	18.75	121/2	6 14
22	1.50	3.75	4 34	2 1/8	12	2.80	7.75	9 1/8	4 16	138	5.60	18.75	125%	6 16
75	1.50	3.75	4 16	2 14	50	3.10	8.50	9 36	4 11	111	6.00	20.50	12 %	6 %
76 76 76 76	1.60	4.25	4 %	2 %	76	3.10	8.50	9 34	4 7/8	1 70	6.00	20.50	12 %	6 18
36	1.60	1.25	- 5	2 1/2	69	3.40	9.50	10	5	133	6.40	22.25	12 %	6 18
33	1.75	4.75	5 14	2 58	15	3.40	9.50	1034	5 1/8	1 1/2	6.40	22.25	13	6 1/2
76	1.75	4.75	5.1/2	2 %	8.1	3.70	10.50	10%	5 %	1.0	6.80		13	6 1/2
	1.90	5.25	5 %	2 7/8	1	3.70	10.50	10 %	5 75	1 %	7.20		13	6 3/2
1/2	1.90	5.25	6	3	132	4.00	11.50	111%	5 %	1 11	7.60		131/2	6 %
37	2.00	5.75	6 %	3 1/8	115	4.00	11.50	1114	5 5%	1 34	8.00		13 1/2	6 %
Ye	2.00	5.75	6 1/2	3 1/4	1 32	4.30	12.75	111/2	5 34	148	8.40		131/6	6 %
22	2.20	6.25	6 34	3 %	1 1/8	4.30	12.75	115%	5 12	1.7%	8.80		14	7
16 16 16 16 16 16 16 18	2.20	6.25	7	3 1/2	1 %	4.60	14.25	1178	5 10	118	9.20		14	7
					1 18	4.60	14.25	12	6	2	9.60		14	7

Reamers of any style, size or length, made to order at special prices.

Reamers for Brass or Bronze require special clearance and are so furnished on request.

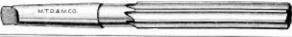
64ths sizes, ½ to 1 in. inclusive, of carbon steel furnished at price of next larger size.

#### CARBON STEEL JOBBERS REAMERS IN SETS

Nos.	601A	601B	601C	601D
Range of Sizes, Inches	14 to 1 x 16ths	4 to 14 x 16ths	14 to 112 x 16ths	4 to 2 x 16ths
Per Set	833.00	53.00	78.50	150.00
Nos	601E 14 to 1 x 32nds 64.00	601F 14 to 1 14 x 32nds 102.50	601G 14 to 1½ x 32nds 153.00	

#### MORSE TAPER SHANK JOBBERS

No. 617-Carbon Steel



No. 1617-High Speed Steel

	Eac	:h	Manager 1	Length	rse	ALLE STORE	Ea	ch	Constant of	Tammet	9 5 4	100	Ea	eh	1		10 %
Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Flute, Inches	0 8 5	Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Length Flute, Inches	Morse Taper Shank	Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Length Flute, Inches	08
Market of the property of the contract of	\$1.70 1.80 1.80 1.80 1.90 1.90 1.90 1.90 2.15 2.15 2.15	\$4.00 4.25 4.25 4.25 4.75 4.75 4.75 5.25 5.25 5.25	5486665555555555666	2 1/8 1/4 4 8 8 8 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4	No. 1	50 1 4 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6	\$2.30 2.30 2.30 2.30 2.40 2.40 2.65 2.65 2.90 2.90 3.10 3.35 3.35	\$5.75 5.75 5.75 6.25 6.25 6.75 7.25 7.75 8.50 8.50	644 644 644 644 644 644 644 644 644 644	2 % 2 % 3 % 4 % % 4 % % 4 % % 4 % % 4 % % 4 % % 4 % % 4 % % 4 % % 4 % % 4 % % 4 % % 4 % % 4 % % 4 % % 4 % % 4 % % 4 % % 4 % % % 4 % M & 4 M & 4	No. 1 No. 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$3.70 3.70 4.10 4.45 4.45 4.80 5.15 5.50 6.25 6.70 7.70	\$ 9.50 9.50 10.50 11.50 11.50 12.50 13.75 15.25 16.75 18.25 21.50 23.25	9 % 9 % 10 % 10 % 10 % 10 % 11 % 11 % 12 ½ 12 12 12 12 12 12 12 12 12 12 12 12 12	4. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	No. 2 No. 3 No. 4

### MORSE TAPER SOCKET





No. 636—Finishing

No. 637—Roughing For Reaming Drill Sockets, Spindles, etc.

Size of Finishing Reamer Each Length Flutes, Each No. of Taper Length, Inches No. of Taper Size of Finishing Reamer Length Flutes, Finishi'g Roughi'g No. 636 No. 627 Length, Finishi'g Roughi'g No. 636 No. 637 End Sm. Inches End Inches End Lg. End |Sm. . 250 4.20 0 \$1.60 \$1.90 3 % 2 14 367 4 \$ 5.05 5 1/4 1.289 q 1.017 .367 2.00 2.40 5 1/2 6.60 .517 5 7.90 10 614 1.799 1.471 3 1/2 2.60 3.10 .745 2 ,569 6 12.00 14.40 12 8 1/2 2.555 2.112 3.40 4.10 3 4 14 988 .775

Morse Taper Reamers larger than No. 1 can be made with oil holes, at special prices. Reamers for Short Shanks made to order. Prices quoted on application.

### MORSE STRAIGHT SHANK FLUTED CHUCKING

No. 655-Carbon Steel



No. 1655-High Speed Steel

	Ea	ch	la long!	Length	Total I	Es	ich	Di mani	Toward		161	ach		Section.
Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Flutes, Inches	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Length Flutes, Inches	Diam., Inches	Carbon Steel	High Speed Steel	Length. Inches	Length Flutes. Inches
1/8	\$0.90	\$2.00	3 1/2	7/8	18	\$2.00	\$5.25	8	2	1	\$3.45	\$10.00	10 1/2	2 %
22	1.00	2.50	4	1	38	2.25	5.75	8	2	1 12	3.70	11.25		2 %
16	1.00	2.50	4 1/2	1 1/8	98	2.25	5.75	9	2 1/4	1 //	3.70	11.25		2.34
n2	1.20	3.00	5	1 1/4	53	2,40	6.25	9	2 %	1.8.	3.90	12.50	10 1/2	2 34
14	1.20	3.00	6	1 1/2	11	2.40	6.25	9	2 1/4	1 1/8	3.90	12.50	11	2 7/8
32	1.30	3.25	6	1 1/2	33	2.55	6.75	9	2 1/4	1 5	4.15	13.75	11	2 %
76	1.30	3.25	6	1 1/2	3/4	2.55	6.75	9 1/2	2 1/2	1 %	4.15	13.75	11	2 %
3.5	1.45	3.75	6	1 1/2	11.5	2.80	7.25	9 1/2	2 1/2	1 72	4.35	15.25	11	2.7%
3/8	1.45	8.75	7	1 %	13	2.80	7.25	9 1/2	2 1/2	1 1/4	4.35	15.25	111/2	3
13	1.60	4.25	7	1 %	3.5	3.00	8.00	9 1/2	2 1/2	1 /6	4.60	17.00	111/2	3
Ϋ́σ	1.60	4.25	7	1 %	7/8	3.00	8.00	10	2.5%	1 3/8	4.80	18.75	12	3 1/4
33	1.80	4.75	7	1 %	32	3,25	9.00	10	2.5%	1 70	5.05	20.50	12	3 1/4
1/2	1.80	4.75	8	2	48	3.25	9.00	10	2 %	1 1/2	5.25	22.25	12 1/2	3 1/2
33	2.00	5.25	8	2	3 ½	3.45	10.00	10	2.5%	-		0.50010100		

#### MORSE TAPER SHANK FLUTED CHUCKING

No. 656-Carbon Steel



No. 1656-High Speed Steel

esalisms -	Eac	ch	1	Length	Morse	2033	Eac	ch	The second	Length	Morse
Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Flutes, Inches	Taper Shank	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Flutes, Inches	Taper
1/4 1/2 1/6	\$1.45 1.55 1.55	\$3.50 3.75 3.75	6 6 6	1 ½ 1 ½ 1 ½		3± % 32	\$3.60 3.60 3.90	\$ 9.00 9.00 10.00	9 ½ 10 10	2 ½ 2 ½ 2 ½ 2 ½	} 0. 20
36 36 36 36 36 36 36 36 36 36 36 36 36 3	1.75 1.75 1.90 1.90 2.15 2.15 2.40 2.70	4.25 4.25 4.75 4.75 5.25 5.25 5.75 6.25	6 7 7 7 8 8 8 8 8	1 1/2 1 1/4 1 1/4 1 1/4 1 1/4 2 2 2 2 2 2 2 2 2 2 4	No. 1	15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3.90 4.15 4.15 4.45 4.45 4.70 4.70 5.00 5.00 5.20	10.00 11.00 11.00 12.25 12.25 13.50 14.75 14.75 16.25	10 10 10 ½ 10 ½ 10 ½ 10 ½ 11 11	25% 25% 22% 22% 22% 22% 22% 22% 22% 22%	No. 3
78 81 11 12 14 26 16 16 16	2.90 2.90 3.05 3.05 3.35 3.35	6.75 6.75 7.25 7.25 8.00 8.00	9 9 9 9 14 9 14 9 14	2 1/4 2 1/4 2 1/4 2 1/4 2 1/6 2 1/6 2 1/6	No. 20	1 ¼ 1 % 1 % 1 % 1 ½	5.20 5.50 5.75 6.05 6.30	16.25 18.00 19.75 21.50 23.25	$\begin{array}{c} 11 \frac{1}{9} \\ 11 \frac{1}{9} \\ 12 \\ 12 \\ 12 \\ 12 \frac{1}{9} \end{array}$	3 3 3 1/4 3 1/4 3 1/2	} %

#### MORSE STRAIGHT SHANK ROSE CHUCKING

No. 662-Carbon Steel



No. 1662—High Speed Steel

Same I	Ea	ch	1	I amount	Total Control	Ea	ch	1	Length	- manual/	E	ach		Length
Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Length Flutes, Inches	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Flutes, Inches	Diam., Inches	Carbon Steel	High Speed Steel	Length, Inches	Flutes, Inches
1/8	\$0.90	\$2.00	3 1/2	7/8	16	\$2.00	\$5.25	8	2	1	\$3.45	\$10.00		2 3/4
22	1.00	2.50	4	1	18	2.25	5.75	8	2	1 12	3.70	11.25		2 34
16	1.00	2.50	4 1/2	1 1/8	5%	2.25	5.75	9	2 1/4	1 70	3.70	11.25		2 %
32	1.20	3.00	5	11/4	31	2.40	6.25	9	2 1/4	1 3 3	3.90	12.50		2 3/4
1/4	1.20	3.00	6	1 1/2	11	2.40	6.25	9	2 1/4	1 1/8	3.90	12.50		2.7%
33	1.30	3.25	6	1 1/2	99	2.55	6.75	9	2 1/4	1 32	4.15	13.75		2 7/8
Y.	1.30	3.25	6	11/2	3/4	2.55	6.75	9 1/2	2 1/2	1,3	4.15	13.75		2 7/8
11	1.45	3.75	6	11/2	35	2.80	7.25	9 1/2	2 1/2	1 37	4.35	15.25		2 7/8
3/8	1.45	3.75	7	1 %	13	2.80	7.25	9 1/2	2 1/2	1 1/4	4.35	15.25		3
10 H	1.60	4.25	7	1 %	93	3.00	8.00	9 1/2	2 1/2	1,5	4.60	17.00		3
75	1.60	4.25	7	1 %	7/8	3.00	8.00	10	2 %	1 3/8	4.80	18.75		3 1/4
15	1.80	4.75	7	1%	88	3.25	9.00	10	2 %	1 70	5.05	20.50	12	3 1/4
1/2	1.80	4.75	8	2	15	3.25	9.00	10	2 %	1 1/2	5.25	22.25	12 1/2	3 1/2
12	2.00	5.25	8	2	33	3.45	10.00	10	2 %	000000		- Carteston A. Co	700/388	1

These Reamers have no radial clearance but are ground with a longitudinal clearance. Keep cutting points sharp. Reamers for Brass or Bronze require special clearance and are so furnished on request.

MORSE TAPER SHANK ROSE CHUCKING

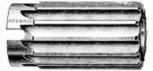
No. 663-Carbon Steel



No. 1663-High Speed Steel

-	Eac	h		Length,	0 4.4		Eac	h _	S 953	Length.	0 LM		Eac	ch	1 1 1 1 2 3	Length,	er a
Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Flute, Inches	Morse Taper Shank	Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Flute, Inches	Mors Tape Shan	Diam., Inch.	Carbon Steel	High Speed Steel	Length, Inches	Flute	Mors
14 mm	\$1.45 1.55 1.55 1.75 1.75 1.75 1.90	\$3.50 3.75 3.75 4.25 4.25 4.75	6 6 6 7 7	1 ½ 1 ½ 1 ½ 1 ½ 1 ½ 1 ¾ 1 ¾ 1 ¾	No. 1	SEC SET SEC SET ON PRINCIPLE SEC	\$2.90 2.90 3.05 3.05 3.35 3.35 3.60	\$6.75 6.75 7.25 7.25 8.00 8.00 9.00	9 9 9 9 1/2 9 1/2 9 1/2 9 1/2	2 1/4 2 1/4 2 1/4 2 1/6 2 1/6 2 1/6 2 1/6	No. 2	1 % 1 % 1 % 1 % 1 % 1 % 1 % 1 % 1 % 1 %	\$4.45 4.70 4.70 5.00 5.00 5.20	\$12.25 13.50 13.50 14.75 14.75 16.25	11 11 11	2 % 2 % 2 % 2 % 2 % 2 % 2 %	No. 3
100	2.15 2.15 2.40 2.40 2.70 2.70	5.25 5.25 5.75 5.75 6.25 6.25	7 8 8 8 8	1 % 2 2 2 2	No. 2	76 88 18 31 1 12	3.60 3.90 3.90 4.15 4.15 4.45	9.00 $10.00$ $10.00$ $11.00$ $11.20$ $12.25$	10 10 10 10 10 10 ½ 10 ½	2 % 2 % 2 % 2 % 2 % 2 % 2 % 2 %	No. 3	1 1/4 1 1/5 1 3/8 1 1/5 1 1/2	5.20 5.50 5.75 6.05 6.30	16.25 18.00 19.75 21.50 23.25	11½ 11½ 12 12 12½	3 3 3 ¼ 3 ¼ 3 ½	No. 4

These Reamers have no radial clearance but are ground with a longitudinal clearance. Keep cutting points sharp.



# MORSE SHELL No. 625-Carbon Steel

No. 1625-High Speed Steel



MORSE ROSE SHELL No. 626—Carbon Steel

	Ea	ch	# s	. 00	la second	Ea	ch	48	00	heen's	Ea	ch	# s	80		Es	ch	5.0	1 9
In.	Carbon Steel	High Speed Steel	Length, Inches	Hole, Inche	Dia., In.	Carbon Steel	High Speed Steel	Length	Hole, Inches	Dia., In,	Carbon Steel	High Speed Steel	Length	Hole, Inches	****	Carbon Steel	High Speed Steel	Length, Inches	Hole,
1/2	\$1.70	\$3.25	2	1/4	132	\$3.10	\$5.50	2 %	5/8	210	\$6.95	\$14.25	3 3/4	11/4	9.18	\$15.10	\$ 40.00	4 1/2	13
12	1.80	3.40	2	34	1,3	3.10	5.50	2 34	56	2 1/8	7.30	15.00	3 %	1 1/4	4 70	15.60	42.50	4 1/2	13
8	1.80	3.40	2	3/4	1 1/2	3.30	5.75	2 %	%	216	7.65	15.75	3 %	11/4	910	16.10	45.25	4 1/2	1:
18	1.90	3.55	2	1/4	11/4	3.30	5.75	2%	58	2 1/4	8.00	16.50	3 34	11/4	9 72	16.60	48.00	4 1/2	1
5/8	1.90	3.55	2	1/4	1.2	3.55	6.00	2 %	58	216	8.35	17.25	3 %	1 1/4	9 16	17.20	50.75	5	2
31	2.00	3.70	21/4	38	116	3.55	6.00	3	34	2 %	8.70	18.00	3 34	11/4	9.78	17.80	58.50	5	2
6	2.00	3.70	2 1/4	3/8	1 11	3.80	6.50	3	3/4	276	9.05	18.75	3 %	11/4	316	18.40	56.50	5	2
13	2.10	3.85	2 1/4	3/8	1 %	3.80	6.50	3	34	2 1/2	9.40	19.50	3 34	11/4	0 74	19.00	59.50	5	2
4	2.10	3.85 4.00	2 14	3/8	133	4.05	7.00	9	34	2 %	9.80	20.50	4	1 1/2	518	19.60	62.75	5	2
18	2.20	4.00	2 1/4	3%	176	4.05	7.00	3	34 34	2 %	10.20	21.75	4	1 1/2	0.78	20.20	66.00	5	2
8 7	2.30	4.25	2 1/2	1/2 1/2	145	4.30	7.50	9	3/4	211	10.60	23.00	4	11/2	016	20.80	69.25	5	2
15 16	2.30	4.25	2 3/2	1/2	1 1/2	4.55	8.25	9	%	2 %	11.00	24.25	4	1 14	+	21.40	72.50	5	2
18	2.40	4.50	2 1/2	1/2	1 %	4.80	9.00	2	34	213	11.40	25.50	4	1 1/2	4 1/8	22.90	79.00	5 1/2	2
5	2.40	4.50	2 1/2	1/2	112	5.10	9.75	3 1/2	1 "	2 %	11.80	27.00 28.50	4	1 1/2	4 1/4	24.40	85.50	5 1/2	2
1	2.50	4.75	2 1/2	1/2	1%	5.40	10.50	3 1/2	î	215	12.60	28.50 30.00	*	1 1/2	4 %	25.90	92.00	5 1/2	2
-	2.50	4.75	2 1/2	1/2	118	5.70	11.25	3 1/2	1	2.1	13.10	31.50	4.1/	1 1/2	4 1/2	27.40	98.50	5 1/2	2
12	2.70	5.00	2 1/2	1/2	1 7%	6.00	12.00	3 1/2	1	3 1/6	13.60	33.25	4 1/2	1%	4 %	29.30	105.00	6	2
6	2.70	5.00	2 34	5%	1 18	6.30	12.75	3 1/2	1	3 3 3	14.10	35.25	4 1/2	1%	4 34	31.20	111.50	6	2
2	2.90	5.25	2 34	5%	2	6.60	13.50	3 1/2	1	3 14	14.60	37.50	4 1/2	1%	4 1/8	33.10	118.00	6	2
8	2.90	5.25	2%	5/8		10000040850	CONTRACTOR.			0.74	**:00	37.30	4 1/2	1%	5	35.00	125.00	6	2

9 88

Reamers Style 626 have no radial clearance but are ground with longitudinal clearance. Keep cutting points sharp.

13

14

# DRILL AND REAMER ARBORS

MORSE STRAIGHT SHANK

MORSE TAPER SHANK

16.20

21.60



No. 505-For Shell Drills and Reamers

Nos.	Each	Fitting Sizes, Inches	Length, Inches	Length, Shank, Inches	Diam. Shank, Inches
3	\$2.40	1/2 to 5/8	8	5 1/2	72
4	2.70	₹1 to ₹5	9	6 %	1/2
5	3.00	13 to 132	9 1/9	611	5%
6	3.30	1 to 1 to	10	648	3/4
7	3.60	1 % to 133	11	7 %2	7/8
8	4.00	1 11 to 2	12	732	11/8
9	4.50	2 1 to 2 1/2	13	8 3	1 %
10	5.25	2 % to 3	14	8 8 %	1 %
11	7.50	3 1/2 to 3 1/2	15	9 %	2
12	10.50	3 % to 4	16	935	2 1/4
40	19 50	4.17 to 4.17	9.77	0.00	0.27

17

				100	
No.	506—For	Shell	Drills	and	Reamers

Morse Taper Fitting Sizes, Inches Length, Inches Nos. Each Shank, Nos. 3 \$2.90 1/2 to 8 1 4 3.25 31 to 38 2 2 9 5 3.60 18 to 1 12 9 1/2 3.95 6 1 to 1 32 10 3 7 1 % to 181 4.30 11 3 8 4.80 1 11 to 2 12 9 5.40 2 % to 2 1/2 13 4 2 % to 3 10 6.30 14 5 9.00 3 % to 3 ½ 3 % to 4 11 15 5 12 12.60 16 5

4 % to 4 %

4 % to 5 %

17

18

5

5

2% 4 % to 5 1/2 10% 14 18 Shanks on above arbors are ground standard to sizes listed,

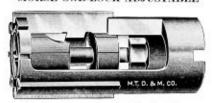
4 % to 4 %

13

13.50

### REAMERS MORSE ONE-LOCK ADJUSTABLE

No. 730 Carbon Steel



No. 1730 High Speed Steel

Blades Furnished Only in Sets.

Total and	Ea	ch	Extra l Per		720	10	ach		Blades, Set
Diam., Inches	Carbon Steel	High Speed Steel	Carbon Steel	High Speed Steel	Diam., Inches	Carbon Steel	High Speed Steel	Carbon Steel	High Speed Steel
3/4	\$6.00	\$7.00	\$2.80	\$4.00	2,7	\$11.70	\$14.30	\$4.30	\$6.63
18	6.00	7.00	2.80	4.00	2 1/2	12.00	14.65	4.40	6.80
7/8	6.00	7.00	2.80	4.00	2 %	12.30	15.00	4.50	6.9
10	6.00	7.00	2.80	4.00	2.5%	12.60	15.30	4.60	7.10
1	6.00	7.00	2.80	4.00	211	12.90	15.65	4.70	7.2
1 16	6.00	7.00	2.80	4.10	2 %	13.20	16.00	4.80	7.4
1 1/8	6.00	7.25	2.80	4.20	2 13	13.70	16.55	4.90	7.5
1 %	6.00	7.50	2.80	4.30	2 7/8	14.20	17.10	5.00	7.7
11/4	6.00	7.60	2.80	4.40	211	14.70	17.65	5.10	7.8
1 %	6.30	7.95	2.85	4.50	3	15.20	18.20	5.20	8.0
1 3/8	6.60	8.30	2.90	4.60	3 1/2	17.75	20.95	5.30	8.1
176	6.90	8.65	2.95	4.70	3 1/8	18.00	21.20	5.40	8.3
1 1/2	7.20	9.00	3.00	4.80	3 3	18.25	21.45	5.50	8.4
1,%	7.50	9.35	3.05	4.90	3 14	19.00	22.35	5.60	8.6
1 %	7.80	9.65	3.10	5.00	3 %	19.25	22.60	5.70	8.7
148	8.10	10.00	3.15	5.10	3 3/8	19.50	22.85	5.80	8.9
1 %	8.40	10.35	3.20	5.20	37	19.75	23.10	5.90	9.0
118	8.70	10.70	3.30	5.30	3 1/6	20.50	24.00	6.00	9.2
1 %	9.00	11.05	3.40	5.40	3 1/2 3 1/2	20.75	24.25	6.10	9.3
1 18	9.30	11.40	3.50	5.50	3 %	21.00	24.50	6.20	9.5
2	9.60	11.75	3.60	5.60	3 11	21.25	24.75	6.30	9.6
2 10	9.90	12.05	3.70	5.75	3 34	23.00	27.60	7.50	11.0
2 1/8	10.20	12.40	3.80	5.90	3 13	23.25	27.85	7.60	11.2
2 %	10.50	12.75	3.90	6.05	3 7%	23.50	28.10	7.70	11.4
2 1/4	10.80	13.25	4.00	6.20	3 18	23.75	28.35	7.80	11.6
2 70	11.10	13.60	4.10	6.35	4	24.50	29.30	7.90	11.8
2 3/8	11.40	13.95	4.20	6.50		83318076		5,57650	11.70.40

An Adjustment Socket Wrench and a Key are furnished without charge with each Reamer.

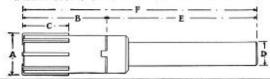
Turning the Cam Bolt in the Shell by the slotted head moves all blades at once and all exactly alike, outward from When the desired diameter is reached be sure all blades are firmly seated on Cam Bolt before the Lock the center. Nut is tightened.

Nothing to get out of order. Only three parts besides blades. One movement operates all blades at once. One nut locks them.

Exact adjustment is quickly made to any size within range without regrinding blades.

Reamers for Brass or Bronze require special clearance and are so furnished on request,

#### DIMENSIONS OF ONE-LOCK REAMER PARTS



A Diameter of Reamer, Inches	B Length of Reamer, Inches	C Length of Blade, Inches	Diameter of Arbor, Inches	E Length Straight or Morse Taper Arbor, Inches	F Whole Length Reamer and Arbor, Inches
% to 18	218 2.3.	1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5% %	6 % 7 1/6	9 16 10 2
1 1/4 to 1 1/2 1 1/4 to 2 2-	3 1 h 4 %	115	76 1 1/6	7 % 8 ¼	$11\frac{9}{16}$ $12\frac{9}{16}$
2 1/4 to 2 11 2 3/4 to 3 A	4 1 8 5 3 c	2 %	1 % 1 %	8 ¾ 9 ¼	13 18 14 18
3 1/4 to 3 1/4 3 3/4 to 4	6 1/2	3 3/4	1 ¾ 2 ¼	10	15 1/4 16 1/2

Keys No. 1 fit Reamers ¾ to 1% in. inclusive.

Wrenches No. 3 fit Reamers 1 1/4 to 1 1/2 in. inclusive. Wrenches No. 4 fit Reamers 1  $\frac{34}{5}$  to  $2\frac{1}{16}$  in, inclusive. Wrenches No. 5 fit Reamers  $2\frac{1}{5}$  to  $2\frac{1}{16}$  in, inclusive.

Keys No. 2 fit Reamers 1¼ to 2½ in inclusive.

Keys No. 3 fit Reamers 2¼ to 4 in inclusive.

Wrenches No. 1 fit Reamers ¾ to ½ in inclusive.

Wrenches No. 2 fit Reamers 1 to 1½ in inclusive. Wrenches No. 6 fit Reamers 2 3/4 to 3 11/2 in. inclusive. Wrenches No. 7 fit Reamers 3 % to 4 in, inclusive.

One-Lock Reamers ¾ to ¼ inch diameter will adjust ½ inch; 1 to 1½ inches adjust .025 inch; 1¼ to 1½ inches adjust ½ inch; 2 to 2½ inches adjust ½ inch; 2¼ to 4 inches adjust ⅓ inch.

The One-Lock Reamer can be adjusted larger or smaller with equal facility. The blades have no endwise move-The One-Lock Reamer can be adjusted larger or smaller with equal facility. ment in the shell, and can always ream to the bottom of a blind hole.

In ordering blades, state size of Reamer and also length of shell.

Note-For Arbors fitting these Reamers see following page.

## ARBORS

#### FOR ONE-LOCK ADJUSTABLE REAMERS



No. 550-Straight Shank



No. 551-Morse Taper Shank

Nos.	Each	Fitti	ng ;	Sizes,	Whole Length, Inches	Length of Shank, Inches	Diam. of Shank Inches
1	\$2.00	34	to	18	7 %	518	5/8
2	2.50	1	to	110	8 %	611	%
8	2.90	1 1/4	to	111	8 7/8	615	7/8
4	3.75	1 %	to	2 3	9 1/2	7 %	1 1/8
5	4.15	2 1/4	to	214	101/4	7 11	1 %
6	5.80	2 %	to	311	11	8 70	1 34
7	7.50	3 %	to	4	12	876	2 1/4

Nos.	Each	Fitting Sizes, Inches	Whole Length, Inches	Morse Tape: Shank, Nos,
21	\$2.50	34 to 38	7 %	2
22	3.00	1 to 1 a	8 %	3
23	3.50	1 1/4 to 11/2	8 76	3
24 25	4 50	1% to 2%	9 1/2	4
25	5.00	2 1/4 to 2 11	10 %	4
26	7.00	2 % to 3 11	11	5
27	9.00	3 % to 4	12	5

# SPIRAL FLUTED EXPANSION REAMERS

#### MORSE



No. 717-Carbon Steel

The spiral flutes make it an easy free cutting tool which will not catch or chatter in reaming holes where there is a slot, keyway, etc. It has a long guide and is especially adapted for reaming piston pin holes. It is easily adjustable to a few thousandths oversize.

Diam. Inches	Each	Length of Flute, Inches	Length of Pilot, Inches	Length Over All, Inches	Diam. Inches	Each	Length of Flute, Inches	Length of Pilot, Inches	Length Over All Inches
3/8 1/2 1/2 1/2	\$ 5.60 5.80	1 % 1 %	1 ½ 1 ½	6 1/6 6 1/8	76 33	\$10.00 10.40	3 % 3 ½	2 2	9 %
3.	5.80	151	1 1/2	6 %	15	10.80	3 5/8	2	9 5%
15	6.00	181	1 1/2	6 3 3	31 31	11.30	318	2	9 %
1/2	6.00	152	1 1/2	676	1	11.80	3 7/8	2	10 1/4
47	6.20	1 118	1 1/2	6 %	1 3 3	12.20	4		10 1/2
10	6.40	210	1 1/2	6 3 3	118	12.60	414	2	10 12
16 18	6.70	2 36	1 1/2	7	1 3 2	13.10	4 1/4	2 2 2	10 18
.6093	6.70	275	2	7 3 1	1 1/8	13.60	4 1/8	2	10 %
5%	7.00	2 %	2	7 3 2	1 32	14.10	4 3	2	11 12
83	7.30	2 1/2	2	8 3 3	1,3	14.60	4 %	2	111/8
.668	7.70	211	2	8 %	1 32	15.60	4 1/4	2	11 32
116	7.70	2-11	2 2 2	8 %	1.225	15.60	4 1/4	2 2	11%
83	8.00	2 34	2	8 3 5	1.234	15.60	4 34	2	11%
.734	8.40	2 18		8 3 2	11/4	15.60	4 1/4	2 2	11%
.740	8.40	2 13	2	8 3 3	1 9 9	16.60	4 %	2	111/2
3/4	8.40	2 13	2	8 3 3	1 %	16.60	4 76	2	11%
89 18	8.80	3	2	812	111	18.00	4 1/2	2	1111
18	9.20	3 16	2	9	1 %	18.00	4 To	2	11 %
85.0	9.60	3 1/4	2	9 1/4	133	20.00	4 1/2	2	11 %
.850	10.00	3 %	2	9 %	170	20.00	4 7 7	2	1115
.855	10.00 10.00	3 %	2	9 %	116	22.00	4 1/2	2 2	12
.865	10.00	3 % 3 %	2 2	9 % 9 %	1 1/2	22.00	4 1/2	2	1278

#### MORSE EXPANSION



No. 715—Carbon Steel

Diam. Inches	Each	Length, Inches	Length Flutes, Inches	Diam. Inches	Each	Length, Inches	Length Flutes Inches
1/4	\$3.00	4	1 1/2	1 1/2	\$7.00	10	4 1/2
32	3.05	4	1 1/2	11/2	7.25	10	4 1/2
The .	3.10	4	1 1/2	1 3 3	7.50	10	4 1/2
33	3.15	4	1 1/2	1 1/8	7.75	10 1/2	4 %
86	3.20	5	2	1 4	8.00	10 14	4 3/4
18	3.25	5	2	1 3	8.30	10 1/2	4 34
% 11 15 15	3.30	5	2	1 37	8.60	10 1/2	4 34
15	3.35	5	2	1 1/4	8.90	11	5
1/4 1/2	3.40	6	2 1/2	1 32	9.20	11	5
33	3.50	6	2 1/2	1 15	9.50	11	5
18	3.65	6	2 1/2	111	10.00	11	5
12	3.80	6	2 1/2	1 3/5	10.50	111%	5 1/4
56	4.00	7	3	1 1 3	11.00	111/2	5 14
88	4.20	7	3	176	11.50	111/2	5 14
16	4.40	7	3	135	12.00	111/2	5 1/4
99	4.60	7	3	1 1/2	12.50	12	5 1/2
34	4.80	8	3 1/2	1,5	13.00	12	5 1/2
951	5.00	8	3 1/2	1 5%	13.50	12 1/2	5 34
13	5.25	8	3 1/2	111	14.00	12 1/2	5 %
87	5.50	8	3 1/2	134	14.50	13	6
7/8	5.75	9	4	118	15.00	13	6
22	6.00	9	4	1 %	15.50	13 1/2	6 14
28 18	6.25	9	4	118	16.00	13 1/2	6 14
32	6.50	9	4	2	16.50	14	6 1/2
1	6.75	10	4 1/2	120		100.00	1.00

Limits of expansion recommended for these Reamers are as follows: Sizes  $\frac{1}{4}$  to  $\frac{1}{4}$  .005 inch;  $\frac{1}{2}$  to  $\frac{3}{4}$  .008 inch; 1 to  $1\frac{3}{4}$  .010 inch;  $1\frac{3}{4}$  to  $2\frac{1}{4}$  inch .012 inch;  $2\frac{3}{4}$  to 3.015 inch.

The guides to these Reamers are ground .005 inch under size.

Reamers for Brass or Bronze require special clearance and are so furnished on request.

64th sizes from 1/4 to 1 inch inclusive furnished at list price of next larger listed size.

#### MORSE ADJUSTABLE



No. 720—Carbon Steel

A Wrench furnished with each Reamer.

Diam., Inches	Each	Length, Inches	Diam., Inches	Each	Length Inches
1	\$5.90	9	2 %	\$19.50	14
1 10	6.20	10	2 %	21.00	14
1 1/8	6.50	10	270	22.50	14
1 %	6.80	10	2 1/2	24.00	14
1 1/4	7.10	10	2 %	25.00	14 1/2
1 %	7.40	11	2 %	26.00	14 1/2
1 % 1 %	7.80	11	211	27.00	14 1/2
175	8.20	11	2 %	28.00	14 1/2
1 1/2	8.60	11	218	28.75	15
1 %	9.00	12	2 7/8	29.50	15
1 %	9.30	12	215	30.75	15
111	9.60	12	3	32.00	15
1 34	9.90	12	3 1/8	36.00	15 1/9
144	10.20	13	3 1/4	40.00	151/2
1 %	10.40	13	3 %	44.00	16
145	10.60	13	3 1/6	48.50	16
2	10.80	13	3 5%	53.50	16 1/2
2 10	11.80	13 1/2	3 %	58.50	16 1/2
2 1/8	12.80	131/2	3 7/8	63.50	17
2 %	15.60	13 1/2	4	67.50	17
2 1/4	18.00	13 1/2		301 S ON TO S. 1	

A ground, tapered plug, acting upon the chasers, adjusts the Reamers to the size desired.

To operate the plug, the Head Nut should be loosened, and the plug then turned until size desired is obtained. The Head Nut should then be tightened. Reamers 1 inch diameter will adjust .02 inch;  $1\frac{1}{16}$  to  $1\frac{1}{26}$  inches adjust  $\frac{1}{22}$  inch;  $1\frac{1}{16}$  to 3 inches adjust  $\frac{1}{24}$  inch;  $3\frac{1}{26}$  to 4 inches adjust .055 inch.

Reamers for Brass or Bronze require special clearance and are so furnished on request.

## MORSE IMPROVED ADJUSTABLE

No. 728—Carbon Steel



No. 1728-High Speed Steel

Size	E	ach	Bla	tra ides, Set	Extra	Rana	re	Lgth.,		Size	Each		Extra Blades, Per Set		Extra Range Ls		Lgth	h., Lgth. Blade,
Letter	Car- bon Steel	High Speed Steel		High Speed Steel	Nuts, Each	Inch					Car- bon Steel	High Speed Steel	Car- bon Steel	High Speed Steel	Nuts, Each	Inches	În.	In.
A	\$4.50	85.75	\$1.80	\$4.20	\$0.30	15 to	37	5 1/2	11/4	H	\$5.80	\$7.85	\$2.40	\$4.80	.40	12 to 1 16	9	3 1/4
В	4.50	5.75	1.80	4.20	.30	17 to	12	5 34	144	I	7.00	8.75	2.70	5.10	.45	1 to 1 to	10	3 3%
C	4.75				.30		33	6 1/2	2 1/4	J	8.00	10.00	2.70	5.10	.45	1 % to 133	11	315
D	4 75	6.25	1.80	4.20	.30	% to	33	6 %	2 1/4	K	10.00	12.50	3.30	6.00	.50	144 to 144	12	4 30
E	5.00	6.50	2.10	4.50	.35		25	7	276	L	11.50	15.00	3.90	8.10	. 65	135 to 135	14	4 %
F	5.00				.35		93	7 1/2	213	M	15.00	18.75	4.20	9.90	.70	135 to 205	16	5
G	5.50	7.10				SI to	13	8	3								10.10	

Per Set

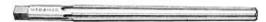
Per Set

Set of Reamers A to H, inc., Carbon Steel, in Case...\$41.50 | Set of Reamers A to K, inc., Carbon Steel, in Case...\$67.00

The six tapered blades slide lengthwise in the body slots and are firmly held by the two collars in the position that gives the size desired. No special wrench is needed.

Reamers for Brass or Bronze require special clearance and are so furnished on request.

#### MORSE TAPER PIN



No. 680—Carbon Steel

Taper 1/4 inch Per Foot.

Size Number	Each	Diam. at Small End. Inches	Length, Inches	Length Flutes, Inches
000	\$ 1.50	.101	2	1 36
00	1.35	.114	2 1/4	1 1/2
0	1.00	.127	2 %	1 %
1	1.00	.146	2 1/2	1 34
2	1.25	.162	3	2
3	1.50	.183	3 1/2	2 1/4
4	1.75	. 208	4	2 1/2
5	2.00	. 240	4 1/2	3
6	2.25	.279	5	3 %
7	2.50	.331	6	4 1/2
8	3.00	.398	6 %	5 1/4
9	3.50	.482	8	6 1/8
10	4.50	.581	9	7
11	6.00	.706	111/4	8 1/4
12	7.50	. 842	13 %	10
13	9.00	1.009	16	12
14	11.00	1.250	184	1.4

These Reamers have the same taper, and each will overlay in convenient measure the next size smaller.

Special sizes made to order at special prices. Reamers for Brass or Bronze require special clearance and are so furnished on request.

#### TAPER PIN REAMERS IN SETS

Per Set

No. 680A-Set, 1 Each 00 to 5 Taper Pin Reamers. \$11.00 No. 680B-Set, 1 Each 0 to 5 Taper Pin Reamers. 9.50 No. 680C-Set, 1 Each 0 to 10 Taper Pin Reamers. 26.50

#### MORSE BIT STOCK TAPER



No. 692—Carbon Steel

Taper 1 inch to the foot. Diameter at large end of flutes is  $\frac{1}{16}$  inch larger than nominal size.

Nominal Size, Inches	Each	Length, Inches	Length Flutes, Inches	Diam. Small End, Inches	Diam. Large End. Inches
1/8	\$0.60	3 %	1 %	.052	16
16	. 60	3 7/8	1 34	.104	34
34	. 60	4	1 7/8	.156	-Fe
18	. 60	4 1/8	2	.208	34
34	. 65	4 3/4	2 1/8	.260	70
Ž,	.70	4 3%	2 1/4	.313	1,6
1/2	. 75	4 1/6	2 34	. 365	A.
10	.80	4 56	2 1/6	.417	54
54	. 95	4 34	2 56	.469	11
11	1.10	4 3/4	2 34	.521	34
3/4	1.25	5	2.7%	.573	13
18	1,50	5 1/6	3	. 626	74.
74	1.75	5 14	3 1/4	.677	15
15	2.00	5 %	3 14	.730	1 16
1	2.25	5 16	3 3%	782	1.2-

#### BIT STOCK TAPER REAMERS IN SETS

Per Set

#### MORSE SPIRAL TAPER PIN



No. 683—Carbon Steel No. 1683—High Speed Steel

Taper ¼ inch Per Foot.

Size Number	Diam, at Small End, Inches	Length, Inches	Length Flutes, Inches	Carbon Steel Each	High Speed Steel Each
000	.101	2	1 %	\$1.75	\$
00	.114	2 14	1 1/2	1.75	2.25
0	.127	2 3/8	1 %	1.75	2.25
1	.146	2 1/2	1 %	2.00	2.50
2	.162	3	2	2.25	2.75
8	.183	3 1/2	2 1/4	2.50	3.00
4	.208	4	2 1/2	2.75	3.50
5	.240	4 1/2	3 .	3.00	3.75
6	. 279	5	3 %	3.50	4.25
7	.331	6	4 1/2	4.00	5.00
8	.398	6 %	5 1/4	4.50	5.75
9		8	6 3/4	5.00	
10		9	7	6.00	

## MORSE TAPER SHANK STRUCTURAL

A B C



Long Body, Straight Flutes

No. 697-Carbon Steel

No. 1697-High Speed Steel

#### For Boiler Makers, Bridge and Ship Builders

			E	ich			Lgth.	
Dia.,	B	hes at C	Car- bon Steel	High Speed Steel	Lgth. Inches	Lgth. Flutes Inches	Taper B to C, Inches	Morse Taper Shank
14 12 16 14 14 14 34	14 12 12 13 13 34	52 21 14 14 15 32	\$2.30 2.40 2.40 2.50 2.50		6 % 6 % 6 % 7 % 7 %	3 % 3 ¾ 3 ¾ 4 4	1 1 1 1 1	No. 1.
18 16 16 16 16 16 16 16 16 16 16 16 16 16	100 100 100 100 100 100 100 100 100 100	15 1/4 1/2 1/2 1/2 1/2 1/3 1/4 3/6	2.60 2.60 2.65 2.75 2.90 2.90 3.05	3.75 4.00 4.00 4.25 4.25	8 1/4 8 1/4 9 9 9 9	4 % 4 % 5 % 5 % 5 % 6 %	1 1 2 2 2 2 2 2 2 2	No. 2.
16 18 18 18 11 11 18 18	指 後 指 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	% 16 16 16 16 16 18 18	3.20 3.35 3.50 3.75 4.00 4.25 4.50 4.75 5.00	4.75 5.00 5.30 5.70 6.00 6.50 7.00 7.50	12 12 12 12 12	7% 7% 7% 7% 7% 7% 7% 7%	90 90 90 90 90 90 90 90	No. 3
1 ¼ 1 香 1 % 1 指 1 ½	1 % 1 倍 1 % 1 % 1 %	1 1 1/6 1 1/8 1 1/8	5.50 6.00 6.50 7.00 8.00	8.75 9.50 10.50	13 13 13	7 % 7 % 7 % 7 % 7 %	3 3 3 3 3	No. 4

These Reamers are designed for hard and rough work and are not ground closely to size. These Reamers from ¼ inch to ½ inch inclusive have 4 flutes; from ¼ inches inclusive have 5 flutes; from 1% inches to 1½ inches inclusive have 6 flutes.

MORSE TAPER SHANK STRUCTURAL



Long Body, Spiral Flutes No. 1701—High Speed Steel

For Boiler Makers, Bridge and Ship Builders.

	iamet iches B		High Speed Steel Each	Length, Inches	Length Flutes, Inches	Length Taper B to C Inches	Morse Taper Shank		amet iches B		High Speed Steel Each	Length, Inches	Length Flutes, Inches	Length Taper B to C Inches	Morse Taper Shank
32	33	62	\$3.75	8 1/4	4 3%	1	1	18	18	5%	\$6.00	12	7 %	3	
2	12	1/4	3.75	8 14	4 3%	1		1	1	17	6.50	12	7 %	3	No
35	12	32	4.00	9	5 1/8	2	1	1 16	$1\frac{1}{16}$	34	7.00	12	7 3%	3	0
16 16 16 16 16 16	1'e 12 1/2	re	4.00	9	5 1/8	2	No.	1 1/8	1 1/8	13	7.50	12	7 %	3	0.5
32	32	31 36	4.25	9	5 1/8	2	to l	1 %	1 %	7/8	8.00	12	7 %	3	
18 5%	10 5%	3/8	4.25	9	5 1/8	2	100	100000					ALCOHOL:		3
5/8	5/8	3/8	4.50	10	6 1/8	2	11. 1	114	1 14	15	8.75	13	7 %	3	
		2.35		mercane i		1 22	1.5	1 /	1 76	1	9.50	13	7.3%	3	N
11	11 34	3/8	4.75	11%	7 1/8	3	1 -	1 %	1.3%	1 10	10.50	13	7 %	3	2.0
34	34	76	5.00	12	7 3%	3	No	1 16	1 18	1 1/8	12.00	13	7 %	3	16m
14 34 18 78	18 76	% 16 1/2 16	$\frac{5.30}{5.70}$	12 12	7 % 7 %	3	20	11/2	11/2	1 %	14.00	13	7 %	3	J

All sizes and dimensions and styles not listed are special and subject to special prices.

# MORSE TAPER SHANK, STRUCTURAL



Short Body, Straight Flutes No. 1699—High Speed Steel

Full Diam., Inches	Diam., at Point, Inches	High Speed Steel Each	Length, Inches	Length Flutes, Inches	Morse Taper Shank
14 15 16 11 11	# 2	\$3.00 3.00 3.00 3.20 3.20	5 15 5 16 5 16 5 16 5 16 5 16	2 1/2 2 1/2 2 3/4 2 3/4 2 3/4	No. 1
12 12 14 14 15 14 15 15 15 15 15 15 15 15 15 15 15 15 15	104 104 105 105 104 114 105 105 105 105 105 105	3.35 3.50 3.50 3.70 3.70	6 18 6 18 7 18 7 18 7 18 7 18 7 18 8 18	2 3/4 3 1/2 3 1/2 4 4 4 4 1/2	No. 2
11 % 18 % 18 1 % 1 % 1 % 1 %	## CB 12 88 71 12 88	3.85 4.00 4.25 4.55 4.80 5.20 5.60 6.00 6.40 7.00	8 18 9 14 9 14 9 14 9 14 9 14 9 14 9 14 9 14	4 1/2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	No. 3

Short length Carbon Steel Structural Reamers and all sizes, dimensions and styles not listed are special and subject to special prices.

#### MORSE TAPER SHANK, STRUCTURAL



Short Body, Spiral Flutes No. 1700—High Speed Steel

Full Diam., Inches	Diam., at Point, Inches	High Speed Steel Each	Length, Inches	Length Flutes, Inches	Morse Taper Shank
1/4 52 12 12 34	55 55 55 55 55 55 55 55 55 55 55 55 55	\$3.00 3.00 3.00 3.20 3.20	5 78 5 78 5 18 5 18 5 18	2 1/4 2 1/4 2 3/4 2 3/4 2 3/4	No. 1
12 12 14 14 14 14	10 10 10 10 10 10 10 10 10 10 10 10 10 1	3.35 3.35 3.50 3.70 3.70 3.75	6 15 6 15 7 15 7 15 7 15 7 15 7 15 8 15	2 %4 3 ½ 3 ½ 4 4 4 4 ½	No. 2
11 14 14 14 14 14 14 14 14 14 14 14 14 1	10 To 20 To	3.85 4.00 4.25 4.55 4.80 5.20 5.60 6.00 6.40 7.00	8144 9144 9144 9144 9144 9144 914	4 ½ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	No. 3

Short length Carbon Steel Structural Reamers and all sizes, dimensions and styles not listed are special and subject to special prices.

# COUNTERBORES

MORSE STRAIGHT SHANK



No. 757—Carbon Steel

For A. S. M. E. Standard Machine Screws.

No. and	Fresh	Tap for	Size Body	for Fi	Size l. Head		Size l. Head		Size and Head	Body for Fla		Length,	Decimal Equiva- lent of Body of Screw
Pitch of Screw	Each	Diam. Guide	Diam. Bore	Diam. Guide	Diam. Bore	Diam. Guide	Diam. Bore	Diam. Guide	Diam. Bore	Diam. Guide	Diam. Bore	Inches	
0-80	\$0.60	.046	.062	.046	.090	.062	.090	.062	.136	.062	.136	2	.060
1-72	.60	.059	.075	.059	.112	.073	.112	.073	.159	.073	.159	2	.073
2-64	.60	.070	.088	.070	.134	.086	.134	.086	.185	.086	.185	2	.086
3.56	.60	.078	101	.078	.155	.099	.155	.099	.209	.099	.209	2	.099
4-48	.60	.089	.114	.089	.176	.113	.176	.113	. 232	.113	.232	2	.112
5-44	.60	.099	.127	.099	.198	.125	.198	125	. 256	.125	. 256	2 1/4	.125
6-40	. 60	.110	.140	.110	.219	.140	.219	.140	.280	.140	.280	2 1/4	.138
7-36	. 60	.120	.153	.120	. 240	.152	. 240	.152	.304	.152	.304	2 34	.151
8-36	.60	.136	.166	.136	. 262	.166	,262	.166	.328	.166	.328	2 1/4	.164
9-32	.60	.140	.179	.140	.284	.177	.284	.177	.352	.177	.352	2 1/4	.177
10-30	.60	.152	.192	.152	.305	.191	.305	.191	.375	.191	.375	2 1/2	.190
12-28	. 60	.173	.218	.173	.348	.218	.348	.218	.424	.218	.424	2 1/2	.216
14-24	.75	.193	.244	.193	.390	.242	.390	. 242	.476	. 242	.476	2 1/2	. 242
16-22	.75	.213	. 270	.213	.433	.272	.433	.272	.528	. 272	.528	3	. 268
18-20	.75	. 234	,296	.234	.476	.295	.476	. 295	580	.295	580	3	. 294
20-20	.90	. 261	.322	.261	.518	.323	.518	.323	.632	.323	.632	3 1/4	.320

#### MORSE TAPER SHANK

No. 765-Carbon Steel



No. 1765—High Speed Steel

These Counterbores are furnished either singly or in sets. A set consists of one counterbore for head of screw with guide of body size, one counterbore for head with guide of tap drill size, and one counterbore to enlarge a tap drill hole to body size. Counterbores of other sizes are made to order at special prices.

Diam.	Ea	ch	Diam. In	of Guide, ches	Diam. of Screw &		Morse	Diam.,	E	ach		of Guide, ches	Diam. of		
Coun- ter- bore, Inch.	Carbon Steel	High Speed Steel	For Body Size Hole	For Tap Drill Hole	Pitch, U. S. Std.	Lgth., Inch.	Taper Shank	Coun- ter- bore, Inch.	Carbon Steel	High Speed Steel	For Body Size Hole	For Tap Drill Hole	Screw & Pitch, U. S. Std.	Lgth., Inch.	Morse Tape: Shank
3/4	\$1.75 1.85 2.00	$\begin{array}{c} \$2.60 \\ 2.75 \\ 2.60 \end{array}$		.1865 .241 .1865	1/4 -20 1/4 -1 8 1/4 -20	5 % 6 % 5 %	1 1 1	% % %	\$2.85 2.85 2.85	\$3.60 3.60 5.25	1/2	.4057	1/2-13 1/2-13 3/4-10	7 1/4 7 1/4 9	2 2 3
16 36 36 16 16 16	2.00 2.00 2.10	2.60 2.90 2.75	1/4	.301 .241	1/4 -20 3/6 -16 1/6 -18	5 % 6 ½ 6 ½	1 1 1	18 18 18	3.10 3.10 3.10	4.00 4.00 5.25	2 16	.452	76-12 76-12 18-10	7 1/2 7 1/2 9	2 2 3
	2.10 2.10 2.20	2.75 3.50 3.60	าริ	.347 .4057	7a-18 √a-14 1⁄2-13	6 1/8 7 7 1/4	2 2	18 76 76 76	3.30 3.30 3.30	4.50 4.50 5.50	%	.7333	% -11 % -11 % - 9	7% 7% 9%	2 2 3
10 10 10 10 10 10 10 10 10 10 10 10 10 1	2.35 2.35 2.35	3.00 3.00 3.70	34	. 452	3% -16 3% -16 3% -12	6 1/2 6 1/2 7 1/2	1 1 2	12 12 12	3.55 3.55 3.55	5.00 5.00 5.50	11	.7958	11-11 11-11 18- 9	8 1/4 9 1/4	3 3
% % %	2.55 2.55 2.55 2.70	3.50 3.50 3.80 5.00	A <sub>2</sub> c	.347 .5146 .5771	%-14 %-14 %-11 }-11	7 7 34 8 14	2 2 2 3	1 1 1	3.85 3.85 3.85	6.00 6.00 6.50	34	. 624	%-10 %-10 1 - 8	9 9 9 1/2	3 3

#### MORSE TAPER SHANK INTERCHANGEABLE



No. 760—Carbon Steel

With Interchangeable Blades and Guides.

Size Nos.		Blades		Guides		Morse Size I		Size Blade or		Blades		Guides	
		Sizes by 16ths	Each	Sizes by 16ths	Each	Taper Shank	Nos.	Guide, Each	Sizes by 16ths	Each	Sizes by	Each	Morse Taper Shank
1	\$6.50	34-1 1 15-1 1/2	\$0.85 .95	1/2 - 3/4 1/3 - 1	\$1.00 1.25	}2			2 % +2 ¾ 2 ⅓ -3	1.65	1 1/8 -1 1/4 1 1/6 -1 1/2	\$1.60	1
2	8.75	1 ½ -2 2 ¼ -2 ½	1.25 1.40	⅓-1 1 ⅓-1 ¼	$1.25 \\ 1.45$	}8	3	\$10.00	3 13 -3 14 3 14 3 14	2.15 2.50	1 16 -1 72 1 16 -1 74 1 13 -2	1.75 1.95 2.50	4

# COMBINED DRILLS AND COUNTERSINKS

MORSE TAPER SHANK



No. 497—Carbon Steel 60 Degree Included Angle.

Size		1	2	3	4	5
Diameter Drill, Inches		76	3/2	1/8	7/9	30
Diameter Body, Inches	8	70	10	70	70	16
Each	CHOKO POROZO	\$0.75	. 75	. 75	. 75	. 75
MODEE	STD A	TOTHE	CITANI	y.		

MORSE STRAIGHT SHANK A C B



No. 495—Carbon Steel

60 Degree Included Angle. Always Specify Number and Size.

	Diam, of Drill at	ion.	Per 1	Dozen	Diam.	Decimal
Size	A B	Appro Fract al Eq alents	Carbon Steel	High Speed Steel	of Body C. In.	Equiva- lents A B
1	No. 57 x No. 57	र्देश	\$2.00	\$6.00	1/8	.043x.043
2	No. 55 x No. 55		2.25	6.00	11	.052x,052
3	No. 52 x No. 52	10	2.25	6.00	17	.063x.063
4	No. 49 x No. 49	**	2.50	6.00	15	.073x.073
5	No. 49 x No. 45		2.50	6.00	11	.073x.082
6	No. 46 x No. 46	1/4	2.50	6.00	1.5	.081x.081
7	No. 42 x No. 42	32	2.75	6.00	340	.093x.093
8	No. 42 x No. 30	12 x 1/8	2.75	6.00	310	.093x.128
9	No. 30 x No. 30	1/8	2.75	6.00	3/10	.128x.128
10	No. 22 x No. 22	3/3	3.50	9.00	10 10	.157x.157
11	No. 13 x No. 13	3	3.50	9.00	10	.185x.185
12	3 X 3	***	2.25	6.00	32	.046x.046
14	1 x No. 45		2.25	6.00	13	.062x.082
15	78 X 32		3.50	9.00	70	.187x,156

#### MORSE STRAIGHT SHANK IN SETS



In Screw Top Wood Box

Contains One
Each Size 1, 3, 4, 6,
7, 9, 10 and 11
Straight Shank
Combined Drills
and Countersinks
with Separate Compartment for Each
Size.

No. 50 — Carbon Steel ....\$2.25 No. 50H — High Speed Steel 5.00

2 1/4

7.20

Per Set

34

1/2

2 %

1

#### CENTER REAMERS

MORSE No. 750—Style 1, 60 I	)egree	MTD	AMCG	-
Included Angle			-	NO.
Diam, Body, Inches	34	36	1/2	
Diam. Shank, Inches	18	1/4	3%	
Length, Inches	1 1/2	1 18	2	
Length Shank, Inches.	34	7/8	7/8	

Per Dozen ...... \$3.00 3.60 4.20



No. 750—Style 2, 60 Degree Included Angle

 Diam, Body, Inches
 34
 36
 14
 36
 34

 Diam. Shank, Inches
 38
 14
 38
 36
 1½

 Length, Inches
 1 ½
 1 ¼
 1 ¼
 2
 2 ½
 2 ¾

 Length Shank, Inches
 34
 ½
 %
 %
 %
 1

 Per Dozen
 \$3.60
 4.20
 4.80
 7.80
 10.20

These Reamers with included Angle of 72 and 82 degrees furnished at regular prices. Other angles made to order at special prices.

# COUNTERSINKS

MORSE THREE-GROOVE



No. 490—Carbon Steel

Included angle of cutting point is 82 degrees. Countersinks with other angles made to order at special prices. Diam. Body, Inches. 34 34 54 34 74 1

Diam. Body, Inches. 36 1/2 Length Body, In... 3 Lgth. Over All, In. 4 1/4 Length Twist, In... 2 1/4 2 1/2 2 1/2 314 4 1/4 4 3/4 . 5 5 5 2 1/2 148 2 1/2 270 148 .75 .90 1.05 1.20

# COUNTERSINK BITS



Flat Pattern, for Metal Forged Tool Steel, Carefully Tempered.



Rose Pattern

Drop Forged Tool Steel, Carefully Tested and Tempered, Teeth are Milled on a Hammer Forged Blank of Best Steel.

 Nos.
 315A
 315B
 315C

 Size, Inches
 ½
 ½
 ½

 Weight Per Dozen, Lbs
 1
 1½
 1½

 Per Dozen
 \$3.25
 3.50
 4.00

This is the old standard Rose Pattern Countersink for wood or soft metal.

One Dozen in a Box.



Snail Pattern for Wood

Drop Forged Steel, Carefully Tempered Double Undercut Milled Lips, Cuts Rapidly and Smoothly.

Per Dozen

#### STARRETT



Self-Centering, Double Lip, for Wood Forged Steel, Twisted and Tempered, Bit Brace Shank.

#### CLARK PATTERN



Double Cut, for Wood
Can be Taken Apart for Sharpening, Cuts Smoothly.

Forged from Finest Steel, Polished All Over.

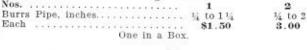
Per Dozen

# BURRING REAMERS



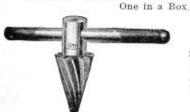
With Bit Brace Shanks
Highest Grade Steel, Accurately Ground.

Nos	Witt	Spiral 241	Flutes. 242	24236	244
Burrs Pipe, Inches. Each		% to 1/2	% to 1 1.25	% to 1 % 1.50	14 to 2 3.00
	With	Straight	Flutes		





With Straight Shanks



#### With T Handle

High Grade Steel, Spiral Flute, Accurately Ground. Each

No. 246—Burrs Pipe ¼ to 2 in...\$4.00 One in a Box.





With Bit Brace Shanks, Straight Flutes Forged Steel, Tempered for Hard Service.

Nos.	388	389
Point, Inches	1/4	36
Large End, Inches	3%	1 1/4
Length Flute, Inches	3	3
Weight Dozen, Lbs	3 %	7.16
Per Dozen	\$17.60	20.25
One in a Box		

# REAMER BITS MAYHEW FLUTED



Fine Tool Steel, Carefully Milled and Tempered
Per Dozen

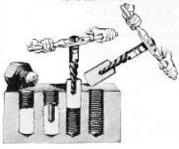
#### MAYHEW SQUARE



No.	390—Forged	Tool	Steel

Size 1	2
Reams Holes, Inches	5/8
Length, Inches 6	6
Weight Per Dozen, Lbs 2	3 1/8
Per Dozen \$4.	50 4.75
One Dozen in a Box.	

# SCREW EXTRACTORS



"EZY-OUT"

For quick and easy removal of broken set and cap screws, studs stay-bolts, pipe fittings, etc.

Drill a hole in broken screw and insert proper size Ezy-Out Screw Extractor, twisting it as though tapping with a left hand tap. The twist forces Ezy-Out's corkscrewlike spirals to grip the

sides of drilled hole and then, as additional force is brought to bear on the Tap Wrench, screw begins to "come"—after which it is an easy matter to spin it out on its own threads,

No. 192—"E	zy-Out s	Crew Extr	actors	
Size Nos	1	2	3	4
Diam. Small End. In		.080	1/8	10
Diam. Large End, In.,	.117	.174	1/4	31
Length Flute, Inches		34	1	11/4
Length Over All, In		2 3%	2 11	3
Each		.60	. 65	. 75
Size Nos	5	6	7	8
Diam. Small End, In	34	3/8	1/2	34
Diam. Large End, In	70	3.2	3/4	1 14
Length Flute, Inches	1 1/2	1 3/4	2	2 1/8
Length Over All, In	3 %	3 34	4 1/8	4 %
Each	\$0.85	1.00	1.35	1.85
Size Nos	9	10	11	12
Diam, Small End, In	1	1 14	1 1/2	1 %
Diam, Large End, In	1 %	1 7°	1 1/8	2 4
Length Flute, Inches		2 1/2	3	3 1/2
Length Over All, In	4.5%	5	5 %	6 1/4
Each	\$2.65	4.00	5.35	6.65
AT	.14	be obtain	ad her me	ing the

Note—The best results will be obtained by using the largest Ezy-Out Screw Extractor possible for any given screw.

"EZY-OUT" SETS

Per Set



No. 17 Set.

No. 15—Tool Room Set, for General Use, Contains 5 Extractors, 1 Each Nos. 1, 2, 3, 4 and 5, Wt. Per Set ½ Lb. \$3.00 No. 15A — Garage Set, Contains 6 Extractors, 1 Each Nos. 1, 2, 3, 4, 5 and 6, Weight Per Set ¾ Lb. . . . . . . 4.00

No. 16—Heavy Shop Set, for Use of Railroads, Steel and Structural Iron Works, Contains 4 Extractors, 1 Each Nos. 6, 7, 8 and 9, Wt. Set 1½ Lbs..... 6.65

#### "EZY-OUT" SETS WITH DRILLS

SFUFU



IZ	E OF DRILLS FOR "EX	Y-O	UT"	SCREW	EXT	RACT	ORS
or	Extractor, Nos Drill, Inches	1	2	3	4	5	6
or	Extractor, Nos Drill, Inches	7	8	9	10	11	12

## PLAIN MILLING CUTTERS



No. 830—Carbon Steel.

MORSE

No. 1830-High Speed Steel.

Cutters of less than % inch face have straight teeth. Cutters of 34 inch face and over have spiral teeth.

In ordering, carefully state diameter and face of Cutter and size of hole desired. Cutters having nicked teeth or dimensions other than listed are special and subject to special prices.



	(Landon Maria		Ea	eh	100000000000000000000000000000000000000			Ea	ch	lancaria.			Ea	ch
Diam., Inches	Face, Inches	Hole, Inches	Carbon Steel	High Speed Steel	Diam., Inches	Face, Inches	Hole, Inches	Carbon Steel	High Speed Steel	Diam., Inches	Face, Inches	Hole, Inches	Carbon Steel	High Speed Steel
2 1/4	1/2	7/8	\$2.25	\$4.15	3	10	1	\$1.75	\$3.60	3	5	1 1/4	\$9.90	\$25.50
2 1/4	1	7/8	3.20	6.00	3	1/4	1	2.10	4.00	3	6	1 1/4	13.70	33.00
2 1/2	16	1	1.65	3.25	3	Yes	1	2.35	4.50	4	1/4	1	2.60	5.50
2 1/2	1/4	1	1.80	3.50	3	3%	1	2.70	5.10	4	34	1 1/4	2.60	5.50
2 1/2	16	1	1.90	3.75	3	36	1 14	2.70	5.10	4	10	1	3.20	6.50
2 1/2	3/8	1	2.10	4.00	3	10	1 14	2.85	5.40	4	Ť	11/4	3.20	6.50
2 1/2	16	1	2.20	4.25	3	1/2	1 1/4	3.10	5.90	4	3%	1	3.85	7.70
2 1/2	1/2	1	2.30	4.50	3	5%	1 1/4	3.50	6.75	4	3/8	1 1/4	3.85	7.70
2 1/2	5%	1	2.50	4.80	3	34	1 1/4	3.85	7.50	4	To To	1 1/4	4.50	8 85
2 1/2	34	1	2.80	5.40	3	7/4	1 1/4	4.20	8.25	4	1/2	1 1/4	5.00	9.75
2 1/2	7/8	1	3.10	6.00	3	1	1 14	4.60	9.10	4	56	1 1/4	5.50	10.90
2 1/2	1	1	3.30	6.50	3	1 1/4	1 1/4	5.10	10.35	4	34	1 1/4	6,00	12.10
2 1/2	134	1	3.70	7.50	3	1 1/2	1 14	5.50	11.50	4	7/8	1 "	6.50	13.35
2 1/2	1 1/2	1	4.00	8.25	3	1.%	1 14	5.70	12.30	4	1	1 1/4	7.15	14.70
2 1/2	1%	1	4.35	9.15	3	2	1 14	6.00	13.30	4	1 1/4	1 %	7.90	16.70
2 1/2	2	1	4.75	10.10	3	2 1/2	11/4	6.60	15.25	4	1 1/2	114	8.40	18.40
2 1/2	2 1/2	1	5.25	11.60	3	3	1 1/4	7.00	17.00	4	2	114	9,50	21.90
2 1/2	3	1	5.70	13.00	3	3 1/2	1 1/4	7.50	18.80	4	3	1 1/4	11.50	28.50
2 1/2	4	1	7.00	16.35	3	4	1 1/4	8.15	20.75	4	4	114	14.00	36.75

## PLAIN SIDE MILLING CUTTERS

No. 833—Carbon Steel.

MORSE

No. 1833-High Speed Steel.



CONTRACT OF	1		Eac	ch	1			Ea	ch	1	12.00	Total Salver	Ea	ch
Diam. Inches	Face, Inches	Hole. Inches	Carbon Steel	High Speed Steel	Diam., Inches		Hole, Inches	Carbon Steel	High Speed Steel		Face, Inches		Carbon Steel	High Speed Steel
2	30	3/2	\$2.35	\$3.60	3	1/2	1	\$4.30	\$7.65	5	1/2	1	\$6.70	\$13.60
2	yla.	5/8	2.35	3.60	3 1/2	76	1	4.80	8.65	5	1/2	11/4	6.70	13.60
2	1/4	1/2	2.60	4.10	3 1/2	1/2	1	5.35	9.60	5	5/8	1	7.30	15.20
2	1/4	5/8	2.60	4.10	3 1/2	- 16	1	5.80	10.65	5	5/8	1 1/4	7.30	15.20
2	3/4	1/2	2.80	4.50	3 1/2	5/8	1	5.80	10.65	5	3/4	1	8.10	17.10
2	34	56	2.80	4.50	4	1/4	1	3.70	7.00	5	34	1 1/4	8.10	17.10
2 1/2	1/4	76	2.80	4.65	4	3/8	1	5.20	9.50	5	1	1	9.90	20.2
2 1/2	15	76	2.90	4.90	4	1/2	1	6.50	11.90	5	1	1 1/4	9.90	20.20
2 1/2	34	76	3.15	5.30	4	34	1 1/4	6.50	11.90	6	1/2	1	8.60	18.6
2 1/2	70	76	3.25	5.50	4	5%	1	7.10	13.15	6	34	1	9.65	22.23
2 1/2	1/2	7/8	3.40	5.80	4	5%	1 1/4	7.10	13.15	6	3/4	11/4	9.65	22 . 2
3	1/4	1	3.15	5.40	4	3/4	1	7.65	14.40	6	1	114	11.00	26.40
3	iπ.	1	3.60	6.25	4	3/4	11/4	7.65	14.40	7	34	1 1/4	17.50	36.2
3	36	1	3.85	6.65	4	7/4	1	8.25	17.30	7	1	1 1/4	20.40	48.1
3	Ta	1	4.10	7.15	4	7/8	1 1/4	8.25	17.30	8	1	114	24.75	55.20

# COARSE TOOTH PLAIN MILLING CUTTERS

MORSE

No. 1802-High Speed Steel.

These Cutters with wide spaced teeth have a marked advantage on many classes of work over the usual types, being capable of removing a considerably greater quantity of metal in a given time without distressing the cutter or overloading the machine.

Diam., Inches	Width Face, Inches	Diam. Hole, Inches	Each	Diam., Inches	Width Face, Inches	Diam. Hole, Inches	Each
2 1/2	2	1	\$10.10	3	5	1 1/4	\$25.50
2 1/2	2 1/2	1	11.60	3	6	1 1/4	33.00
2 1/2	3	1	13.00	4	2	1 1/2	21.90
2 1/2	4	1	16.35	4	3	1 1/2	28.50
3	2	1 1/4	13.30	4	4	1 1/2	36.75
3	2 1/2	11/4	15.25	4	5	1 1/2	45.20
3	3	1 1/4	17.00	4	6	1 1/2	54.10
3	4	1 1/4	20.75				

Cutters having straight teeth, nicked teeth, or dimensions other than listed, are special and subject to special prices.

Coarse Tooth Plain Milling Cutters of carbon steel are special.

# COARSE TOOTH SIDE MILLING CUTTERS

No. 1808-High Speed Steel

Cutters with wide spaced teeth have a marked advantage on many classes of work over the usual types, being capable of removing a considerably greater quantity of metal in a given time without distressing the cutter or overloading the machine.

Diam., Inches	Width Face, Inches	Diam. Hole, Inches	Each	Diam., Inches	Width Face, Inches	Diam. Hole, Inches	Each
3	3/6	11/4	86.65	4	7/4	1 1/2	\$17.30
3	20	1 1/4	7.15	5	74	1 14	17.10
3	1/0	1 1/4	7.65	5	34	1 1/2	17.10
4	1/6	1 14	11.90	5	76	1 1/4	18.75
4	1,6	1 1/2	11.90	5	7/8	1 1/2	18.75
4	5%	1.14	13.15	5	1	1 1/2	20.20
4	5%	1 1/4	13.15	6	3/4	1 1/2	22.25
4	3/4	1 1/4	14.40	6	1	1 3/2	26.40
4	34	1 16	14.40	8	1	1 1/2	55.20
4	7/8	1 1/4	17.30		0.9550	HOW HITE	- CONSTRUCTOR



# CORNER ROUNDING CUTTERS

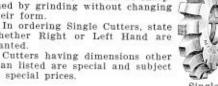
MORSE

No. 868-Carbon Steel No. 1868—High Speed Steel

These Cutters have side and radial clearance, and can be sharpened by grinding without changing their form.

whether Right or Left Hand are wanted.

Cutters having dimensions other than listed are special and subject to special prices.



Single. Left Hand.

Single. Right Hand.

Lancas de la la		100000000000000000000000000000000000000	Each			
Radius of Circle,	Diam. of Cutter,	Diam, of Hole,	Carbon Steel	High Speed Steel		
Inches	Inches	Inches	Single Cutter	Single Cutter		
1/8	2	7/8	\$3.50	\$ 5.30		
14	2 1/4	7/8	4.00	6.40		
96	3	1	5.60	9.65		
1/2	3 1/4	1	7.15	12.75		
98	3 1/2	1	8.70	16.10		

# CONCAVE AND CONVEX CUTTERS



#### For Milling Half Circles

These cutters have formed teeth and can be sharpened without changing their outline.

having Cutters dimensions other than listed are special and subject to special prices.



Convex.

Concave

				Ea	ch		
Diam.	Diam.	Diam.	Cor	ivex	Con	enve	
of Cir- cle, Inches	of Cut- ter, Inches	of Hole, Inches	No. 865 Carbon Steel	No. 1865 High Speed Steel	No. 866 Carbon Steel	No. 1866 High Speed Steel	
1/8	2	7/8	\$2.30	\$ 3.40	\$3,50	8 5.30	
18	2	7/8	2.70	4.00	3.70	5.75	
3/4	2	7/8	3.50	5.30	3.80	6.00	
Ye	2 1/4	7/8	3.75	5.90	4.20	6.70	
76	2 1/4	7/8	3.85	6.10	4.40	7.15	
1/2	2 1/4	7/8	4.00	6.40	4.70	7 75	
1/2	2 1/4	7/8	4.20	6.70	5.00	8.30	
% % %	2 3/4	1	5.15	8.75	6.40	11.25	
3/4	3	1	6.10	10.65	7.50	13.65	
7/8	3 1/4	1	7.15	12.75	8.60	16.00	
1	3 1/4	1	7.70	13.90	9.10	17.50	

# ANGULAR CUTTERS

No. 850—Carbon Steel No. 1850-High Speed Steel

Right and Left Hand. 45 and 60 Degree Angle in Stock.

Angular Cutters are for cutting the teeth of Cutters and Mills and the side teeth of Heading or Straddle Mills, but are not adapted for Spiral Milling.

When ordering, state whether Cutter is to be Right or Left Hand. Illustration shows Right Hand Cutter,

Cutters having dimensions other than listed are special and subject to special prices.

Service Commission of		Diameter	E	ach	
Diameter, Inches	Thickness, Inches	of Hole, Inches	Carbon Steel	High Speed Steel	
21/2	1/2	7/8	\$3.40	85.80	
2 34	1/2	1	3.60	6.40	
3	1/2	11/4	4.30	7.65	

# ANGULAR CUTTERS

MORSE, WITH THREADED HOLE



No. 851-Carbon Steel

No. 1851-High Speed Steel

Right and Left Hand, 60 Degree Angle. In ordering these cutters, in addition to specifying right or left hand, advise position on arbor; that is, whether small or large di-ameter of cutter is to be placed next to shoulder on arbor.

Cutters having dimensions other than listed are special and subject to special

prices.

ick-	Diam. of			
88,	Hole, Inches	Thread	Carbon Steel	High Speed Steel
Te .	%	20	\$3.00	\$4.75 5.80
	16 16	17g %	7g % 20	75 % 20 \$3.00

# DOUBLE ANGLE CUTTERS

MORSE

No. 854—Carbon Steel

No. 1854-High Speed Steel



	Thick-	Diam. of	Each		
Diam., Inches	ness, Inches	Hole, Inches	Carbon Steel	High Speed Steel	
21/2	1/2	7/8	\$3.40	\$5.80	
234	1/2	τ	3.60	6.40	
3	1/2	114	4.30	7.65	

These Cutters are carried in stock as illustrated with the included angle of either 45 or 60 degrees.

KEY SEAT CUTTERS

MORSE

For Woodruff Keys

Furnished regularly Right Hand only. Left Hand and Special Dimension Cutters are subject to special prices.



No. 917-Carbon Steel

No. 1917—High Speed Steel

			100	Diam, of	Ea	ch
Cut- ter, No.	Diam. of Cutter, Inches	Thick- ness, Inches	Length, Inches	Shank, Inches	Carbon Steel	High Speed Steel
1	1/2	Te .	216	1/2	\$1.20	
2	1/2	33	2 3	1/2	1.20	
3	1/2	1/6 1/6 1/8	2 1/8	1/2	1.20	\$1.80
4	56	32	2 32	1/2	1.35	2.10
5	98	1/8	2 1/8	1/2	1.35	2.10
6	% % % % % %	ชโช	2 52	1/2	1.35	2.10
7	%	1/8	2 1/8	1/2	1.60	2.50
8	34	3/3	2 32	1/2	1.60	2.50
9	34	28	278	1/2	1.60	2.50
10	7/8	3/2	2 3	1/2	1.75	2.75
11	7/8	r <sup>3</sup> e	$2\frac{3}{10}$	1/2	1.75	2.75
12	7/8	3/2 1/4	2 7	1/2	1.75	2.75
A	7/8	1/4	2 1/4	1/2	1.75	2.75
13	1	10	2 3	1/2	2.15	3.60
14	1	32	2 72	1/2	2.15	3.60
15	1	1/4	2 1/4	1/2	2.15	3.60
В	1	าซ	250	1/2	2.15	3.60
16	1%	16	2 1/2 2 3 5	1/2	2.30	4.00
17	11%	3/2	235	1/2	2.30	4.00
18	1 1/8	1/4	2 1/2	1/2	2.30	4.00
0	1 1/8	าซึ่ง	2 %	1/2	2.30	4.00
19	11/4	787	2 70	1/2	2.50	4.50
20	11/4	32	235	1/2	2.50	4.50
21	11/4	1/4	2 1/2	3/4	2.50	4.50
D	11/4	Age.	$2\gamma_0^2$	1/2	2.50	4.50
E	1 1/4	3/8	2 %	1/2	2.50	4.50
22	1 %	1/4	2 1/2	1/2	2.65	5.00
23	1 %	16	2 %	1/2	2.65	5.00
F	1 %	3/8	2 %	1/2	2.65	5.00
24	1 1/2	1/4	2 1/2	1/2	2.85	5.30
25	1 1/2	1/4	250	1/2	2.85	5.30
G	1 1/2	3/8	2 %	1/2	2.85	5.30

# END MILLS MORSE TAPER SHANK



Straight Flutes

No. 905—Carbon Steel. No. 1905—Hig

No. 1905—High Speed Steel,



Spiral Flutes

No. 907-Carbon Steel.

No. 1907-High Speed Steel.

	Morse	Ea	ich		Morse	E	ıch -
Diam. Inches	Taper Shank No.	Carbon Steel	High Speed Steel	Diam. Inches	Taper Shank No.	Carbon Steel	High Speed Steel
34	1	\$1.90	82.90	34	2	\$2.70	\$4.60
	1	1.90	2.90	34	3	3.15	6.00
16 36	1	1.90	2.90	7/8	2	2.90	5.30
3.	1	1.90	2.90	76	3	3.25	6.20
16	2	2.50	4.15	1	2	3.10	5.75
1/2	1	1.90	3.00	1	3	3.25	6.20
1/6	2	2.70	4.60	*11/8	3	3.50	7.10
1/2 5/8	2	2.70	4.60	*11/4	3	3.75	8.25

Sizes  $\frac{1}{4}$  to  $1\frac{1}{4}$  in, are furnished regularly with either straight or spiral flutes. Sizes marked \* with spiral flutes only.

These End Mills are regularly furnished in right hand. End Mills having dimensions other than listed and Left Hand Mills are special and subject to special prices.

#### MORSE B. & S. TAPER SHANK



Straight Flutes

No. 906-Carbon Steel. No. 1906-High Speed Steel.



#### Spiral Flutes

No. 908—Carbon Steel. No. 1908—High Speed Steel, When ordering state if right or left hand mill is wanted. Illustrations are left hand mills.

	No.	Es	ich		No.	E	ach
Diam. Inches	of Shank	Carbon Steel	High Speed Steel	Diam. Inches	of Shank	Carbon Steel	High Speed Steel
1/4	4	\$1.35	\$2.10	34	7	\$2.70	\$4.70
1/4	5	1.80	2.80	* 34	9	3.60	7.40
	4	1.35	2.10	7/6	7	2.90	5.30
16: 16: 36:	5	1.80	2.90	* 7/8	9	3.60	7.40
3/8	4	1.35	2.10	1	7	3.15	6.00
36	5	1.80	2.90	*1	9	3.60	7 69
7.	4	1.35	2.10	*11/8	7	3.40	6.80
16 16 1/2 1/2	5	1.80	2.90	1 1/8	9	3.60	7.60
1/2	5	1.80	2.90	*114	7	3.65	7.80
1/2	7	2.70	4.60	1 1/4	9	3.85	8.90
* 2	5	1.80	2.90	*1%	9	4.10	9.40
* 9	7	2.70	4.60	*11/2	9	4.40	10.40
5/8	5	1.90	3.10	*1%	9	4.70	11.90
% %	7	2.70	4.60	*1%	9	5.00	13.15
* 11	7	2.70	4.60	2000		1000	100000000000000000000000000000000000000

Sizes ¼ to 1½ in. are furnished regularly with either straight or spiral flutes. Sizes marked \* with spiral flutes only.

These End Mills are regularly furnished in right or left hand.

End Mills having dimensions other than listed are special and subject to special prices.

## END MILLS

#### MORSE STRAIGHT SHANK



Straight Flutes

No. 890-Carbon Steel.

No. 1890-High Speed Steel.

Diam. Inches	Carbon Steel Each	High Speed Steel Each	Diam. Inches	Carbon Steel Each	High Speed Steel Each
1/8	\$0.70	\$1.00	372	\$0.70	\$1.00
32	.70	1.00	1/4	.80	1.15
ill.	.70	1.00	- fin	.90	1.30



Spiral Flutes

No. 891—Carbon Steel. No. 1891—High Speed Steel.

Diam. Inches	Carbon Steel	High Speed Steel Each	Diam. Inches	Carbon Steel Each	High Speed Steel Each
3%	\$1.00	\$1.50	56	\$1.70	\$2.65
76	1.25	1.90	56	1.80	2.80
14	1.60	2.40	34	2.15	3.50

# COARSE TOOTH SPIRAL END MILLS

#### MORSE



No. 1805-High Speed Steel

For Heavy Milling, with Brown & Sharpe Taper.

Each	Length Flutes, Inches	Length, Inches	Number of Shank	Diam. Inches
\$2.10	48	$\frac{2}{3}$ $\frac{7}{16}$	4	1/4
2.80	+8	3	5	1/4
2.10	7/8	2 3/6	4	de
2.90	76	3 70	5	3
2.10	7/8	2 1/2	4	36
2.90	18 76 76 76 76	2 1/2 3 1/4	5	36
2.90	18	3 1/8	5	70
2.90	1	3 3	5	16
4.60	1 1/8	5 1/6	7	1/6
4.60	1 1/2	5 1/2	7	56
4.70	1 %	5 %	7	36
7.40	1 %	6.7%	54545557777979797979799	强强的
5.30	1 %	5 % 7	7	7/4
7.40	1 %	7	9	7/8
6.00	1 7/8	5.76	7	1
7.60	1 7/4	7 1/8	9	1
6.80	2	6	7	1 1/4
7.60	2		9	1 1/8
7.80	2 2 2 2 2 2 2 4	6	7	1 1/4
8.90	2	7 14	9	1 1/4
9.40	2 1/6	7.3%	9	1 3/8
10.40	2 1/4	7 1/2	9	1 1/2
11.90	2 3/8	7.5%	9 9 9	1 %
13.15	2 1/2	7 %	9	1 %

Carbon Steel Coarse Tooth End Mills, or those having dimensions other than listed, are special and subject to special prices.

These End Mills will be regularly furnished in either right or left hand.

End Mills with tapped hole for drawback spindle are special and subject to special prices.

## SLOTTING END MILLS

MORSE TWO LIPPED



With Brown & Sharpe Taper Shanks

No. 911—Carbon Steel No. 1911—

No. 1911-High Speed Steel

When ordering state if Right or Left Hand are wanted.

es e e e e e e e e e e e e e e e e e e	3000	58.	200000	Ea	ch	
Diam., Inches	Number of Shank	Length, Inches	Length Flutes, Inches	Carbon Steel	High Speed Steel	
3/4	4	2	3%	\$1.10	\$1.65	
3/4	5	2 1/2	34	1.80	2.80	
	7	4 %	% %	2.50	4.15	
vie.	7 5 7	2 11	35	1.80	2.80	
rite.	7	4 15	3.9	2.50	4.15	
34	7	4 16	20	2.70	4.60	
70	7 7	4 55	1% 31 34	2.70	4.60	
1/4	7	4 %	3/4	2.70	4.60	
14 16 16 16 16 16	7	485	83	2.70	4.60	
5%	7	4 13	15	2.70	4.60	
5% 11	7	5 12	1 32	2.70	4.60	
3/4	7	5 1/6	1 1/8	2.70	4.60	
18	7 7 7	5 32	1 373	2.90	5.30	
7/8 7/8	7 9	5 %	1 %	2.90	5.30	
7/8		6 %	1 70	3.60	7.40	
1	9	6%	1 1/2	3.60	7.40	
1 1/8	9	615	111	3.60	7.40	
1 1/4	9	7 1/8	1 %	3.85	8.90	
1 1/2	9	7 1/2	2 1/4	4.40	10.40	

# SHELL END MILLS

MORSE SPIRAL FLUTE



Left Hand.

No. 871—Carbon Steel No. 1871—High Speed Steel

Shell End Mills are regularly furnished either right or left hand and with spiral teeth.

Shell End Mills with straight teeth or those having dimensions other than listed are special and subject to special prices.

	1	agreement 1	Eac	h
Diameter. Inches	Length Cut. Inches	Diameter Hole, Inches	Carbon Steel	High Speed Steel
1 1/4	1 1/4	1/2	\$3.90	\$6.00
1 %	1 1/4	1/2	4.00	6.25
1 1/6	1 1/4	1/2	4.10	6.50
1 56	1 %	34	5.00	8.25
1 34	1 34	%	5.20	8.65
1 7/8	1 %	34	5.30	9.00
2	1 %	34	5.50	9.65
2 1/8	1 %	3/4	5.60	10.30
2 14	2 1/4	1	6.20	11.75
2 %	2 1/4	1	6.50	12.90
2 14	2 1/4	1	6.50	12.90
2 34	2 1/4	1	7.15	14.60
3	2 14	1	8.00	16.65

#### SHELL END MILLS

MORSE COARSE TOOTH

No. 1801-High Speed Steel



Coarse Tooth Shell End Mills are regularly furnished of High Speed Steel, either right or left hand, and with Spiral Teeth. Coarse Tooth Shell End Mills with straight teeth or having dimensions other than listed are special and subject to special prices. Carbon Steel Coarse Tooth Shell End Mills are special.

Diameter, Inches	Length of Cut, Inches	Diameter of Hole, Inches	High Speed Steel, Each
1 1/4	1 1/4	1/2	\$6.00
1 3/8	1 1/4	1/2	6.25
1 1/2	1 1/4	1/6	6.50
1 %	1 34	34	8.25
1 34	1 %	34	8.65
1 76	1 3/4	34	9.00
2	1 3/4	3/4	9.65
2 1/8	1 3/4	34	10.30
2 1/4	2 1/4	1	11.75
2 %	2 1/4	1	12.90
2 1/2	2 1/4	1	12.90
2 3/4	2 1/4	1	14.60
3	2 1/4	1	16.65

# HOLLOW MILLS

MORSE



No. 886—Carbon Steel

No. 1886-High Speed Steel

E & Z	lancour .	000000000000000000000000000000000000000	E	ach	800	C+C/((C+/(C+/(C+/(C+/(C+/(C+/(C+/(C+/(C+		Ea	ch
Dia DES Inc	Diam., Inches	n., Lgth., es Inches	Car- bon Steel	High Speed Steel	Hob Inch		Lgth., Inches		High Speed Steel
12	5%	1 1/2	\$1.35	\$3.60	3/8	1	1 %	\$2.70	84.25
3/8	58	1 1/2	1.35	3.60	16	1	1%	2.70	4.25
32	5/8	1 1/2	1.35	3.60	1/2	1	1 3/4	2.70	4.25
10	5/8	1 1/2	1.35	3.60	Ye	1 1/4	2	3.00	5.55
372	5/8	1 1/2	1.35	3.60	5/8	1 1/4	2	3.00	5.55
34	5% 3%	1 1/2	1,35	3.60	1h	1 1/2	2	3.35	6.85
32 16	3/4	1 1/2	2.00	3.90	34	1 1/2	2	3.35	6.85
76	3/4	1 1/2	2.00	3.90	7/8	1 3/4	2 14	4.00	8.45
11	34	1 1/2	2.00	3.90	1	1 %	2 1/4	4.00	8.45

The holes of these Mills are carefully ground to size, and have a proper relief.

# ADJUSTABLE HOLLOW MILLS



No. 885-Carbon Steel

No. 1885—High Speed Steel

503	Diam.		E	ach	E 4.	Diam.		E	ich
Hole, Theh,	Sh'nk, Inches	Lgth., Inches	Car- bon Steel	High Speed Steel	Dian Hole Inch	Sh'nk, Inches	Lgth., Inches	Car- bon Steel	High Speed Steel
32	5/8	11/2	\$1.85	84.25	You	34	2	\$3.50	\$5.20
3/8	5/8	1 1/2	1.85	4.25	1/2	1	2 1/4	3.50	5.20
32	58	1 1/2	1.85	4.25	16	1	234	4.00	6.85
ile	5/8	1 1/2	1.85	4.25	5%	1	2 1/4	4.00	6.85
372	5/8	1 1/2	1,85	4.25	11	1 1/4	2 1/2	4.60	8.45
1/4	5/8	1 1/2	1.85	4.25	34	11/4	2 1/2	4.60	
1/4 1/2 3/2	3/4	2	2.60	4.70	13	1 1/4	2 1/2	4.60	8.45
10	34	2	2.60	4.70	7/8	1 1/2	2 34	5.50	10.40
33	%	2	2.60		15	11/2	2 34		10.40
3/8	94	2 .	3,50	5.20	1	1 1/2	2 3/4		10.40

Forcing the Ring on the Mill will correct any slight wear.

# SCREW SLOTTING CUTTERS



MORSE

No. 845—Carbon Steel

No. 1845-High Speed Steel

Fine pitch of teeth, adapted to the slotting of screw heads and similar work. Not ground on the sides.

Number	Thickness in	Diameter	Diameter	E	ach
of Gauge	Decimals of 1 Inch	of Cutter Inches	of Hole, Inches	Carbon Steel	High Speed Steel
5	.182	2 3/4	1	\$0.90	
6	.162	2 %	1	.75	\$2.7
7	.144	2 %	1	. 65	2.5
8	.128	2 %	%,1	. 55	2.2
9	. 114	2 34	34,1	. 50	2.0
10	.102	2 %	%, 1	. 45	1.8
11	.091	2 34	%,1	. 40	1.6
12	.081	2 3/4	%,1	. 35	1.4
13	.072	2 3/4	%,1	. 35	1.3
14	.064	2 34	1/2, 5/8, 3/4, 1	. 35	1.2
15	.057	2 34	1/2, 5/8, 3/4, 1	.30	1.1
16	.051	2 34	1/2, 1/8, 3/4, 1	. 30	1.0
17 18	.045	2 % 2 %	1/2, 5/8, 3/4, 1 1/2, 5/8, 3/4, 1	. 25	1.0
19	.035	2 %		.25	1.0
20	.032	2 34	1/2, %, %, 1 1/2, %, %, 1	. 25	1.0
21	.028	2 34	91 81 91 4	.20	1.0
22	.025	2 34	12, %, %, 1 14, %, %, 1	.20	1.0
23	.023	2 %	16, 58, 34, 1	. 20	1.0
24	.020	2 %	1/2. %, 34, 1	.20	1.0
25	.018	2 %	1/2, 5/8, 5/4, 1	.20	1.0
26	.016	2 34	%,1	.20	
27	.014	2 3/4	34,1	. 20	
28	.012	2 34	%, 1	.20	
30	.010	2 %	34.1	.20	
32	.008	2 %	%,1	. 20	
34	.006	2 34	34,1	.20	
10	.102	2 14	5/8	.40	
11	.091	2 1/4	56	. 35	
12	.081	2 1/4	5/8	. 30	
13	.072	2 1/4	5%	.25	
14	.064	2 1/4	5%	. 25	
15	.057	2 1/4	56	. 20	
16	.051	2 1/4	98	.20	
17	.045	2 1/4	5/8	.20	
18	.040	2 1/4	98	. 20	
19	.035	2 1/4	56	. 20	
20	.032	2 1/4	%	. 20	
21	.028	2 1/4	5%	.20	
22 23	.025	2 1/4 2 1/4	5/8	.20	27227
24	.020	2 1/4	56 57	.20	
25	.018	2 14	% %	.20	
26	.016	2 1/4	78 5%	.20	*****
27	.014	2 1/4	5/8	.20	
28	012	2 1/4	5%	. 20	
30	.010	2 1/4	5%	.20	
32	.008	2 1/4	5%	.20	
34	.006	21/4	5%	. 20	
14	.064	1 %	56	.20	
15	.057	1 34	5%	.20	
16	.051	1 %	5%	.20	
17	.045	1 %	5%	.20	
18	.040	1 %	5/8	.20	
19	.035	1 %	5%	.20	
20	.032	1 34	5% 5%	. 20	
21	.028	1 %	56	.20	
22	.025	1 %	5/8	.20	
28	.023	1 % 1 %	5%	. 20	
24	.020	1 %	1/2, 5/8	.15	
25	.018	1 %	1/2 , 5/8	.15	
26	.016	1 %	1/2 . 5/2	.15	
27	.014	1 %	16. 56	.15	
28	.012	1%	1/2 , 5/8	.15	
30	.010	1 % 1 %	1/2 , 1/8	.15	
32	.008	1 %	1/2 , 5/8 1/2 , 5/8	.15	
34	.006	1%	1/2 , 5/8	.15	

Note—High Speed Steel Cutters furnished only with 1 in. hole.

# METAL SLITTING SAWS

MORSE



No. 841—Carbon Steel

No. 1841—High Speed Steel

These saws have holes ground to standard size, and the sides are ground with a proper clearance to allow the cutting of deep slots.

	Width	Diam.		tch		Width	Diam.	ES:	ich
Dia. In.	In.	Hole, In.	Car- bon Steel	High Speed Steel	Dia. In.	Face, In.	Hole In.	Car- bon Steel	High Speed Steel
21/2	22	7/8	\$1.30	\$3.15	4	32	1	\$2.10	\$4.65
21/2	83x	7/8	1.20	3.00	4	Ye	1	2.10	
21/2	16	7/8	1.15	3.00	5	16	1	2.30	5.15
21/2	3/2	%	1.15	3.00	5	33	1	2.00	
21/2	1/8	7/8	1.15	3.00	5	1/8	1-134	2.00	
21/2	32	7/8	1.65	3.25	5	52	1	2.90	7.40
3	23	1	1.60	3.75	5	10	1	2.90	
3	1/8	1	1.50	3.25	6	16	1	5.10	9.40
3	16	1	1.30	3.15	6	32	1	3.85	
3	1/2	1	1.30	3.15	6		1-11/4	3.50	
3	1/8	1	1.30	3.15	6	18	1-114	4.50	
3	र्श्वेष्ठ	1	1.75	3.60	7	16	1	9.50	
4	32	1	2.85	5.75	7	3.	1		10.75
4	234	1	1.85	4.00	7	32 1/8	1-114		10.80
4	16	1	1.60	3.75	7	Ag.	11/4		14.70
4	32	1	1.60	3.60	8	1/8	1-134		15.00
4	1/8	1	1.60	3.60	8	19	114		18.90

# SCREW SLOTTING CUTTER ARBORS

MORSE



No. 536

Number	Fitting Holes, Inches	Length, Inches	Each
1	3/8	6	\$6.75
2	1/2	6	6.75
3	5%	6	6.75
4	34	6	6.75
5	7/8	6	6.75
6	1	6	6.75

# SHELL END MILL ARBORS

MORSE TAPER SHANK



No. 510

State whether Arbors are desired for Right or Left Hand Mills. These Arbors fit Shell End Mills shown on page 30.

Number	Fitting Sizes, Inches	Morse Taper Shank, Number	Each
1	11/4 to 11/2	3	\$5.00
2	1% to 2%	4	5.35
3	2 1/4 to 3	. 4	5.35

# INVOLUTE GEAR CUTTERS

MORSE

For Teeth of Gear Wheels

These cutters can be sharpened by grinding the faces of the teeth. To preserve the form of the cutter care must be used on grinding to keep the face of each tooth radial.

To cut a set of interchangeable wheels with theoretical accuracy, as many cutters would be required as there are different wheels in the set, for the reason that, strictly speaking, the shape of the teeth should vary with every change in the number of teeth in the wheels. As this change of form is slight and becomes less with each increase in the number of teeth, it has been found that a set of wheels ranging from a pinion to twelve teeth to a rack can be cut with sufficient accuracy for most purposes by the use of eight cutters, as follows:

No. 1 will cut wheels from 135 teeth to a rack.
No. 2 will cut wheels from 55 teeth to 134 teeth.
No. 3 will cut wheels from 35 teeth to 54 teeth.
No. 4 will cut wheels from 25 teeth to 26 teeth.
No. 4 will cut wheels from 26 teeth to 34 teeth.
No. 8 will cut wheels from 12 teeth to 25 teeth.
No. 8 will cut wheels from 14 teeth to 16 teeth.
No. 8 will cut wheels from 12 teeth to 13 teeth.

When greater accuracy in the shape of the teeth is desired, we are prepared to furnish to order, either cutters specially adapted to any given number of teeth, or for use with the regular set above, cutters in half numbers as follows:

No. of Cutter	Range	No. of Cutter	Range	
1 1/2 2 3/2 3 3/2 4 4/4	80 to 134 teeth 42 to 54 teeth 30 to 34 teeth 23 to 25 teeth	5 ½ 6 ½ 7 ½	19 to 20 teeth 15 to 16 teeth 13 teeth	

Each cutter is marked with its number, also the diametral pitch and number of Teeth for which it is adapted. In ordering, give number of cutter and diametral pitch required.

			R	EGULA	R		
No.	940	Carbon	Steel	No.	1940—High	Speed	Steel
-	-	Thiomaton	e of Caste	- 1			

	Diameter of Cutter, Inches		Hole.	Each		
Pitch	Carbon Steel	High Speed Steel	Inches	Carbon Steel	High Speed Steel	
1	8 1/2	8 1/2	2	\$57.00	\$135.65	
1 34	7 34	7 34	2	48.00	116.65	
1 1/2	7	7	1 3/4	40.50	86.90	
1 34	6 1/2	6 1/2	1 34	30.35	63.75	
2	5 %	5 %	1 1/2	20.25	43.75	
21/2	5 1/2	5 34	1 1/2	13.90	33.15	
3	4 3/9	4 %	1 1/4	10.10	22.50	
4	3 7/8	4 34	1 1/4	7.60	15.35	
5	3.5%	3 3/4	1 1/4	6.90	12.50	
6	3	3 1/8	1	5.50	10.00	
7	2 1/8	2 7%	1	5.15	8.75	
8	2 7/8	2.7%	1	5.00	8.50	
9	2 34	2 %	1	4.70	7.65	
10	21/4	2 %	7/8	4.50	7.10	
11	2 1/4	2 3/4	7/8	4.20	6.65	
12	2 1/8	2 1/4	3/8	3.90	6.00	
14	2	2 1/8	36	3.40	5.65	
16	2		76	3.20	5.25	
18	1 %	2	3/8	3.00	4.70	
20	1 7/8	2 1/4 2 2 2 1 3/4	76	2.90	4.60	
22	1 1/8	2	7/8	2.80	4.50	
24	1 3/4		7/8	2.65	4.25	
26	1 %	1 %	7/8	2.60	4.20	
28	1 %	1 %	3/8	2.25	3.75	
30	1 %	1 %	3/8	2.25	3.75	
32	1 %	1 34	7/8	2.25	3.75	
36	1 %	1 34	7/8	2.25	3.75	
40	1 %	1 %	3/8	2.25	3.75	
48	1 %	1 %	7/8	2.25	3.75	

FOR USE ON AUTOMATIC GEAR CUTTING MACHINES No. 942—Carbon Steel No. 1942—High Speed Steel With 1 inch Hole.

Diame- tral Pitch	Diameter Inc	of Cutter, hes	Each	
	Carbon Steel	High Speed Steel	Carbon Steel	High Speed Steel
4	3 1/2	3 %	\$7.00	\$13.65
5	3 1/4	3 3%	6.00	11.15
6	3	3 1/8	5.50	10.00
7	2 %	2 7/8	5.15	8.75
8	2 7/8	2 7/8	5.00	8.50
9	2 %	2 34	4.70	7.65
10	2 34	2 %	4.60	7.30
11	2 %	2 %	4.50	7.10
12	2 5%	2 %	4.25	6.70
14	2 1/2	2 1/2	3.75	6.00
16	2 1/2	2 1/2	3.50	5.65
18	2.34	2 %	3.35	5.35
20	2 %	2 %	3.25	5.00
22	2 1/4	2 1/4	3.10	4.80
24	2 1/4	2 1/4	3.00	4.70

#### FOR USE ON AUTOMATIC GEAR CUTTING MACHINES

No. 943—Carbon Steel No. 1943—High Speed Steel

With 114 inch Hole.

Diame- tral Pitch		of Cutter, hes	Each	
	Carbon Steel	High Speed Steel	Carbon Steel	High Speed Steel
3	4 3/4	4 3/4	\$10.10	\$22.50
4	3 %	4 1/4	7.60	15.35
5	3 %	3 3/4	6.90	12.50
6	3 1/2	3 1/2	6.00	10.50
7	3 %	3 %	5.90	10.00
8	3 1/4	3 1/4	5.60	9.40
9	3 1/8	3 1/8	5.35	8.75
10	3	3	5.00	8.10
12	2 7/8	2 7/8	4.60	7.40

#### FOR USE ON AUTOMATIC GEAR CUTTING MACHINES

No. 944—Carbon Steel No. 1944—High Speed Steel

With 11/2 inch Hole.

Diame- tral Pitch	Diameter Inc	of Cutter, hes	Each	
	Carbon Steel	High Speed Steel	Carbon Steel	High Speed Steel
2	5 %	5 3/4	\$20.25	\$43.75
236	5 1/2	5 %	13.90	33.15
3	5	5 1/4	11.40	25.40
4	4 34	4 1/2	7.90	16.90
5	4	4 1/4	7.00	14.10
6	3 %	3 3/8	6.70	12.20

# FOR USE ON AUTOMATIC GEAR CUTTING MACHINES

No. 945—Carbon Steel No. 1945—High Speed Steel

With 1% inch Hole.

Diame- tral Pitch	Diameter Inc	of Cutter, hes	Each	
	Carbon Steel	High Speed Steel	Carbon Steel	High Speed Steel
1 34	6 1/2	6 1/2	\$30.35	\$63.75
2	6 1/2	6 1/2	21.50	48.65
21/2	5 7%	6 1/8	14.60	36.50
3	5 %	5 %	12.00	29.40
4	4 %	4 3/4	8.65	18.15
5	4 %	4 3/8	7.60	15.00
6	4 1/4	4 1/4	7.30	13.40

# INVOLUTE GEAR CUTTERS

MORSE STOCKING

No. 930-Carbon Steel

No. 1930-High Speed Steel



By the use of these cutters, heavy cuts at fast speeds and coarse feeds can be taken because of the easier cutting action produced,

The greater part of the cutting is performed by the plain teeth, the stepped teeth projecting beyond the outline of the plain teeth only enough to break up the chips.

Because of the smooth and easy cutting action a minimum amount of power is consumed in driving the machine.

#### REGULAR

Diam- etral Pitch		Diam. Cutter, Inches		Each	
	Carbon Steel	High Speed Steel	Diam. Hole, Inches	Carbon Steel	High Speed Steel
1	8 1/2	8 1/2	2	\$57.00	\$135.65
1 1/4	7 %	7 %	2	48.00	116.65
1 1/2	7	7	1 34	40.50	86.90
1 %	6 1/2	6 1/2	1 34	30.35	63.75
2 *	5 3/4	5 %	112	20.25	43.75
2 1/2	5 1/2	5 %	1 1/2	13.90	33.15
3	4 3%	4 34	1 1/4	10.10	22.50
4	3 %	4 1/4	1 1/4	7.69	15.35
5	3.5%	3 %	1.14	6.90	12.50
6	3	3 1/8	1	5.50	10.00
7	2 7/8	2 7/8	1	5.15	8.75
8	2.7%	2 7/8	1	5.00	8.50

# FOR USE ON AUTOMATIC GEAR CUTTING MACHINES With 1 Inch Hole

No. 931—Carbon Steel

No. 1931-High Speed Steel

201	Diam. Cu	tter, Inches	Each		
Diam. Pitch	Carbon Steel	High Speed Steel	Carbon Steel	High Speed Steel	
4	3 1/2	3 %	\$7.00	\$13.65	
5	3 1/4	3 3%	6.00	11.15	
6	3	3 1/8	5.50	10.00	
7	2.7%	2 7/4	5.15	8.75	
8	2 7/8	2 1/8	5.00	8.50	

With 134 Inch Hole

No. 932—Ca	urbon Steel	No.	1932—High	Speed Steel
3	4 3/8	4 3/4	\$10.10	\$22.50
4	3 7/8	4 14	7.60	15.35
5	3 %	3 34	6.90	12.50
6	3 1/2	3 1/2	6.00	10.50
7	3 %	3 %	5.90	10.00
8	3 14	3 1/4	5.60	9.40

#### With 132 Inch Hole

No. 933—C	arbon Steel	No.	1933—High	Speed Stee
2	5 3/4	5 %	\$20.25	\$43.75
2 1/2	5 1/2	5 34	13.90	33.15
3	5	5 1/4	11.40	25.40
4	4 1/4	4 1/2	7.90	16.90
5	-4	4 1/4	7.00	14.10
6	3 34	3 7/8	6.70	12.20

#### With 1% Inch Hole

io. 934—Carbon Steel		No.	1934—High	Speed Stee
1 3/4	6 1/2	6 1/2	\$30.35	\$63.75
2	6 1/2	6 1/2	21.50	48.65
2 1/2	5 %	6 1/8	14.60	36.50
3	5 %	5 %	12.00	29.40
4	4 %	4 %	8.65	18.15
5	4 3/6	4 %	7.60	15.00
6	4 1/4	4 14	7.30	13.40

Note—Cutters for Pitches not given in above Lists will be made to order.

# INVOLUTE GEAR CUTTERS MORSE LARGE DIAMETER

No. 941—Carbon Steel

No. 1941-High Speed Steel



Cutters with  $1\frac{1}{2}$  inch hole have keyways  $\frac{3}{8}$  inch wide and  $\frac{1}{16}$  inch deep.

Cutters with 2 inch hole have keyway ½ inch wide and 3 inch deep.

When ordering these cutters be sure to state if 1 ½ or 2 inch hole is desired.

Cutters for pitches not given in this list made to order.

Diam-	Diam, Cutt	er, inches	Diam.	E	ich
etral Pitch	Carbon Steel	High Speed Steel	Inches Hole,	Carbon Steel	High Speed Steel
1	8 1/2	8 1/2	$1\frac{1}{2}-2$	\$57.00	\$135.65
1 1/4	7 %	7.3%	1 1/2-2	48.00	116.65
1 1/2	7 1/4	7.34	1 1/2 -2	41.75	91.90
1 34	6 %	6 34	1 1/2 -2	31.65	70.00
2	6 1/4	6 1/4	1 1/2 -2	21.50	48.65
2 1/4	6 1/4	6 14	1 1/2-2	17.10	40.60
2 1/2	6 1/4	6 14	1 1/2 -2	15.20	36.50
2 3/4	5.34	6 1/4	1 1/2 -2	13.75	34.65
3	5 1/4	5 %	1 1/2 -2	12.00	25.40
4	5 1/4	5 1/4	1 1/2-2	10.00	20.75
5	5 1/4	5 14	$1\frac{1}{2}-2$	8.75	19.10
6	4 1/4	4 14	1 1/2 -2	7.30	13.40
7	4 1/4	4 14	1 1/2 -2	7.10	12.50
8	4 1/4	4 1/4	1 1/2 -2	6.80	12.20.
10	4 1/4	4 1/4	1 1/2 -2	6.60	11.50
12	4 1/4	4 1/4	1 1/2-2	6.00	10.90
14	4 1/4	4 1/4	1 1/2 -2	5.00	9.40
16	4 1/4	4 1/4	1 1/2-2	5.00	9.40

# CUTTERS FOR MITRE AND BEVEL GEARS

MORSE

No. 964--Carbon Steel

No. 1964-High Speed Steel



Diam-	Diam.		Diam.	E	ich
etral Pitch	Carbon Steel	High Speed Steel	Hole, Inches	Carbon Steel	High Speed Steel
3	4	4	1 1/4	\$9.50	\$17.90
4	3 1/2	3 5%	1 1/4	7.00	13.65
5	3 1/4	3 3%	1 14	6.00	11.15
6	3	3 1/8	1	5.50	10.00
7	2 7/8	2.7%	1	5.15	8.75
- 8	2 7/8	2 1/8	1	5.00	8.50
10	2 1/4	2 3/8	7/8	4.50	7.10
12	2 1/8	2 1/4	7/8	3.90	6.00
14	2	2 1/8	7/8	3.40	5.65
16	2	2 1/8	7/8	3.20	5.25
20	1 %	2	7/8	2.90	4.60
24	1 %	1 34	76	2.65	4.25

# FOR USE ON AUTOMATIC GEAR CUTTING MACHINES With 7's Inch Hole

No. 965-Carbon Steel

No. 1965-High Speed Steel

Diam-	Diam. Cutt	er, Inches	Titom	Ea	ch
etral Pitch	Carbon Steel	High Speed Steel	Diam. Hole, Inches	Carbon Steel	High Speed Steel
4	3 3/8	3 1/2	3/4	\$7.00	\$12.50
5	3 1/8	3 1/4	36	6.00	10.30
6	3	3 1/4	7/4	5.50	10.00
7	2 34	2 7/9	7/4	5.15	8.75
8	2 34	2.7%	76	5.09	8.50
10	2 %	2 5%	76	4.60	7.30
12	2 1/2	2 1/2	7/4	4.00	6.25

Eight cutters made for each pitch. See page 32. Cutters having dimensions other than listed are special and subject to special prices.

# SPROCKET WHEEL CUTTERS FOR ROLLER CHAINS

MORSE



No. 987—Carbon Steel

No. 1987-High Speed Steel

American Standard Tooth Forms.

Adopted by S.A.E., A.S.M.E. and A.G.M.A.

Cir-	Diam.			Width	Size	Ea	ch
cular Pitch, Inch.	of Roll, Inch.	No. of Teeth in Sprocket	Diam. Cutter, Inches	of Cutter, Inches	of Hole, Inch.	Carbon Steel	High Speed Steel
%	.200 {	6 7 to 8 9 to 11 12 to 17 18 to 34 35 & Over	0.000000000000000000000000000000000000	を受ける。 ・ 大きのは、 ・ たるのは、 ・ 大きのは、 ・ 大きのは、 ・ 大きのは、 ・ 大きのは、 ・ 大きのは、 ・ 大きのは、 ・ たるのは、 ・ 大きのは、 ・ たるのは、 ・ た	1	\$4.80 4.80 4.80 4.60 4.60 4.60 6.10 6.10	\$8.00 8.00 8.00 7.65 7.65 7.65
1/2 or 5/8	.313	7 to 8 9 to 11 12 to 17 18 to 34 35 & Over	3 1/4 3 1/4 3 1/4 3 1/4		1	6.60 6.60 6.60	10.65 11.65 11.65 11.65 11.65 11.65
%	.400	7 to 8 9 to 11 12 to 17 18 to 34 35 & Over	3 1/4 3 1/4 3 1/4 3 1/4	34.	1	6.60 6.60 6.60 6.60	11.65 11.65 11.65 11.65 11.65
%	.469	6 7 to 8 9 to 11 12 to 17 18 to 34 35 & Over		And the second s	1	8.50	13.90 13.90 15.50 14.15 14.15 14.75
1	.563	7 to 8 9 to 11 12 to 17 18 to 34 35 & Over	4	114 114 1 6 1 6 1 1 6 1 1 6	1%	10.75	20.65 20.65 20.65 19.65 19.65
1 or 11/4	.625	7 to 8 9 to 11 12 to 17 18 to 34 35 & Over	4 % 4 % 4 % 4 %	1 1/2 1 1/2 1 1/2 1 1/2 1 1/2 1 1/2 1 1/2	1%	10.40 10.40 11.40 12.25 12.25 12.25 11.90 13.65	22.50 22.50 24.50 24.50 23.50 28.65
1¼ or 1½	.750	7 to 8 9 to 11 12 to 17 18 to 34 35 & Over	4 % 4 % 4 % 4 % 4 % 4 % 4 %	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11/4	14.65 14.65 13.85 14.85 14.50 14.65	31.25 31.25 28.90 31.25 30.15
11/2	.875	7 to 8 9 to 11 12 to 17 18 to 34 35 & Over	4 % 4 % 4 % 4 % 4 % 4 %	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11/4	14.65 15.75 14.85 14.85 14.50	31.25 31.25 33.90 31.25 31.25 30.15 40.50
1%	1.000	7 to 8 9 to 11 12 to 17 18 to 24 35 & Over	5 % 5 % 5 % 5 %	2 % 2 % 2 % 1 8 % 2 % 2 % 2 % 2 % 2 % 2 % 2 % 2 % 2 %	11/2	18.50 19.70 19.70 21.00 19.10 19.10 23.00	44.90 44.90 48.30 43.75 43.75 53.00
2	1.125	7 to 8 9 to 11 12 to 17 18 to 34 35 & Over	- + + + + + + + + 5 G T 5 B 5 B 5 B 5 B 5 B 5 B 5 B 5 B 5 B 5	21 21 24 21	11/2	23.00 24.50 24.50 23.80 23.80	53.00 57.00 57.00 57.75
2 1/2	1.550 <	7 to 8 9 to 11 12 to 17 18 to 34 35 & Over	6 % 6 % 6 % 6 % 6 % 6 % 6 % 6 % 6 % 6 %	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1%	37.00 27.00 39.50 36.40 28.90	85.65 91.50 91.50 97.90 90.30 96.60
3	1.900	7 to 8 9 to 11 12 to 17 18 to 34 35 & Over	8	2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2	58.85 59.60 63.50 59.15 59.15 58.20	142.65 147.40 157.00 146.65 146.65 150.80

# CUTTERS FOR FLUTING REAMERS

MORSE



No 991—Carbon Steel No. 1991—High Speed Steel

These cutters are especially adapted for fluting reamers and have greater strength than those made for grooving both taps and reamers.

In ordering give number of cutter, or diameter and number of flutes of reamers.

Cutters having dimensions other than listed are special and subject to special prices.

Cut-	Dian	of	No Teeth	Diam. of	Hole in	Eac	h
ter No.	Rear	ner,	in Reamer	Cutter, Inches	Cutter, Inches	Carbon Steel	High Speed Steel
1	1/8 to	76	6	2	1	\$2.70	\$ 4.00
2	1/4 to	0 16	6	2	1	3.50	5.30
3	3/8 to	o To	6	2	1	3.70	5.75
4	1/2 to	11	6 to 8	2 1/4	1	4.00	6.40
5	% to	1	8	2 1/4	1	4.20	6.70
6	1 16 to	11/2	10	2 1/4	1	4.40	7.15
7	1 % to	2 1/8	12	2 1/2	1	4.80	8.00
8	2 14 to	3	14	2 3/4	1	5.60	9.60

# CUTTERS FOR GROOVING TAPS AND REAMERS

MORSE

No. 992—Carbon Steel No. 1992—High Speed Steel

	-	Diam. of Hole in			Each		
	Cutter No.	Cutter, Inches	Cutter, Inches	Carbon Steel	High Speed Steel		
	1	2	1	\$2.30	\$ 3.40		
A	2	2	1	2.70	4.00		
	3	2 1/8	1	3.75	5.90		
The second second	4	2 1/4	1	4.00	6.40		
and the same	5	2 %	1	4.80	8.00		
	6	2 1/2	1	5.10	8.60		
100	7	2 %	1	6.40	11.25		
	8	2 7/8	1	7.25	13.15		

These cutters are designed for grooving either taps or reamers, in accordance with tables below; for example, No. 5 will flute taps for sizes  $\frac{1}{16}$  to  $\frac{1}{36}$  in, or reamers of sizes  $\frac{1}{16}$  to  $\frac{1}{36}$  in diameter. For grooving reamers it is necessary only to cut one or more grooves of a less depth in order to flute unevenly.

Cutter No.	Diameter of Tap, Inches	No. Teeth in Tap	Diameter of Reamer, Inches	No. Teeth in Reamer
1	0 to 1/8	4	1/4 to 1/4	6
2	1/2 to 1/4	4	% to %	6
3	32 to 34	4	18 to 1/2	6
4	7's to %	4	17 to 11/8	6 to 8
5	11 to %	4	1 to 1 %	8 to 10
6	18 to 114	4	133 to 2	10
7	1% to 1%	4	21 to 21/2	10
8	111 to 2	4	2 % to 3	10

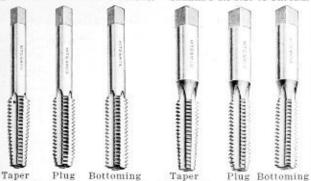
In ordering give number of cutter, or diameter and number of teeth of reamer,

When you buy a MORSE drill you have at your service a tool in which the steel, temper and point are combined to give you the utmost in drilling ability.

# HAND TAPS

MORSE

Shanks Size of Bottom Thread. Shanks Full Size of Thread.



U. S. Standard Thread furnished unless otherwise specified. A Set consists of three taps. Left Hand Taps are special.

Taps 1/8 in. diameter and under have three flutes, & in. diameter and over have four flutes.

Orders for Hand Taps to and including  $\frac{3}{8}$  in. will be filled with taps having shanks full diameter of thread. Taps  $\frac{7}{16}$  in. and larger will be furnished with shanks smaller than root diameter of thread.

We will furnish at regular prices % in, hand taps with shanks smaller than root diameter of thread.

Sizes, lengths and threads not listed are subject to special prices.

#### No. 1040-Carbon Steel, Smaller than 14 inch

Diam., Inches			Number of	Number of Threads to Inch		
	Each Per Set	U, S. S. Std.	Whit- worth Std.	Length, Inches		
70	\$0.50	81.50	64	60	1.5%	
ric .	. 45	1.35	60		1 11	
12	.40	1.20	5.0	48	1 12	
1.1	. 40	1.20	4.8	4 2 4 2 3 4 4 5 5	1.7%	
18	.35	1.05	4.0	4.0	1 12	
1/3	. 35	1.05	4.0	FERRITARE.	2	
र्रो	.35	1.05	36	3.2	2 78	
22	.35	1.05	32		214	
18	. 40	1.20	24	24	2.74	
44	.40	1.20	24	411111111	2.78	
37	. 45	1.35	24	24	2.78	
44	.45	1.35	24		239	

## No. 1040-Carbon Steel, 14 inch and Larger,

Std.   Std.				Nun	nber of	Threa	ds to	the Inch	-5 55
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Diam., Inch.	Each	Per Set			worth	ish Std.	Threads Also	Lgth., Inch.
2 1/2 11 50 34 50 4 4 8 34	10.00 Hall of the transfer of the section of the se	50 555 600 70 800 1 .05 1 .20 1 .40 1 .60 2 .25 2 .60 3 .50 4 .20 5 .80 6 .70 8 .00 9 .20	1.50 1.65 1.80 2.10 2.40 2.70 3.15 3.60 4.80 6.75 6.00 6.75 10.50	18 16 14 13 12 11 10 10 99 87 77 66 55 44 44 44 44 44 44 44 44 44 44 44 44	24 24 20 20 18 18 16	86442211110099987766655442	22 20 18 16 16 14 14	20, 27, 32 20, 27 20, 27 12, 24, 27 12, 27 12, 27 12, 27	100 00 000 4 4 4 4 4 5 1 5 5 6 6 5 7 7 7 8 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1

#### No. 2040-High Speed Steel

Diam., Inches	Each	U. S. S. Thread	S. A.E. Thread	Diam., Inches	Each	U.S.S. Thread	S. A.E. Thread
14	\$0.85	20	28	34	83.10	10	16
100 84	1.10	18	24	1 18	4.30 5.75	9 8	14, 18
19	1.30	14	20	1 1/6	7.45	7	12
32	1.55	13	20 18	134	9.55	6	12
56	2.20	11	18	11/2	14.75	6	12

# HAND TAPS

MORSE SPIRAL POINTED



No. 1045—Carbon Steel

Spiral Pointed Taps are Stronger, require less power and produce more accurate work than ordinary taps. They are furnished in plug style only. U. S. Standard Threads furnished unless otherwise specified. Left Hand Taps are special.

		Number	of Threads to	the Inch	
Diam., Inches	Each	U. S. Std.	S. A. E.	U.S. Form Also Furnished	Number of Flutes
1/8	80.45	4.0			2
7.0	. 50	24	*******	3.2	2
14	. 55	2.0	2.8	2.4	2
ra	. 60	18	24	20	2
38	.70	16	24		3
ile	. 75	14	2.0		3
1/2	. 85	13	20		3
10	1.00	12	1.8		3
56	1.10	11	18		3
34	1.45	10	16		3
78	1.90	9	14.18		4
1	2.40	S	14		4

### No. 2045—High Speed Steel

Diam., Inches	Each		S.A.E. Thr'ad	Diam., Inches	Each	U.S.S. Thr'ad	S.A.E. Thr'ad
1/4	80.95	2.0	2.8	19	82.05	12	18
76	1.05	18	24	56	2.40	11	18
36	1.25	16	24	34	3.35	10	16
76	1.45	14	20	76	4.60	9	14.18
36	1.70	13	20	1	6.15	8	14

### MACHINE SCREW TAPS

MORSE A. S. M. E. STANDARD



#### No. 1066-Carbon Steel

Furnished in Plug Style only. Left Hand Taps are special.

Screw Gauge No.	Approx. Diam., Inches	Each	Per Dozen	Std. No. of Threads	Threads Also Furnished	Length Inches
. 0.	.060	\$0.50	\$6.00	80		1 5%
1	.073	.50	6.00	7.2	56.64	111
2	.086	.45	5.40	6.4	56	1 3/4
3	.099	. 40	4.80	56	48	1 18
4	.112	.40	4.80	4.8	32, 36, 40	
5	.125	. 35	4.20	4.4	36, 40	113
6	.138	. 35	4.20	4.0	32, 36	2
8	.164	. 35	4.20	3.6	30, 32, 40	2 1/8
10	.190	.40	4.80	3.0	24. 28, 32	
12	.216	. 45	5.40	28	24, 32	236
14	.242	. 45	5.40	2.4	20	2 1/2

#### No. 2066-High Speed Steel

Screw Gauge No.	Approx. Diam., Inches	Each	Per Dozen	Std. No. of Threads	Threads Also Furnished	Length, Inches
4	.112	80.70	88.40	4.8	36, 40	1 %
6	.138	.70	8.40	4.0	3.2	2
8	.164	.70	8.40	3.6	32	2 1/8
10	.190	.75	9.00		24, 32	2 3/8
12	. 216	.80	9.60	28	24	2 3/8
14	.242	. 85	10.20	2.4	2.0	2 1/2

6 8 10

12

14

242

## MACHINE SCREW TAPS

MORSE SPIRAL POINTED



#### A. S. M. E. Standard, Two Fluted

Stronger and requires less power than ordinary taps. They are furnished in plug style only. Left hand taps are special.

#### No. 1067-Carbon Steel

Gauge Nos.	Approx. Diam., Inches	Each	Standard Threads Per Inch	Threads Also Furnished	Length, Inches
3	.099	\$0.60	56	48	118
4	.112	.50	48	36,40	1 78
5	.125	. 45		4.0	118
6	.138	. 45	4.0	32, 36	2
8	.164	. 45	3.6	32	2 1/8
10	.190	. 50	3.0	24, 32	238
12	.216	. 55	28	24, 32	2 %
14	.242	. 55	2.4	20 .	2 1/2

No	. 2067—H	ligh Speed 8	steel	
.112	80.80	48	36, 40	1 7/8
.138	.80	4.0	3.2	2
.164	.80	36	32	2 3/8
.190	.85	1040401-00101-1	24, 32	2 %
.216	.90	28	24	2.3%

20

2 1/2

## TAPPER TAPS

95

MORSE



No. 1071—Carbon Steel

U. S. Form of thread always furnished unless otherwise ordered. When ordering specify length desired.

Tapper Taps will be furnished with plain round, squared, flatted, Acme or all styles of National shanks at regular prices. All others will be considered special.

Sizes, lengths and threads not listed are subject to special prices.

Left Hand Taps are specials.

	Thr	eads Per	Inch	Length	Price I	Each by
Diam., Inches	U. S. Std.	S. A. E. Std.	Whit- worth Std.	Thread, Inches	12 Inch.	
1/4	20	28	20	134	80.75	8 0.90
Ar	18	24	18	2	.85	1.00
3/4	16	24	16	2	. 95	1.10
70	14	2.0	14	2 1/4	1.05	1.23
1/2	13	2.0	12	2 1/4	1.15	1.3
20	12	18	12	2 1/2	1.35	1.50
56	11	18	11	2 1/2	1.50	1.73
11	11	16	11	2 1/2	1.70	1.93
16 16 16 16 16 16 16 16 16 16 16 16 16 1	10	16	10	2.34	1.95	2.10
13	10		10	2 3/4 3 3	2.20	2.3
3/8	9	14, 18	9	3	2.50	2.7
18	9		9	3	2.90	3.1
1		14	8	3 1/2	3.30	3.6
11/8	7	12	7	3 1/2		4.1
11/4		12	7	3 1/2		5.10
1 %	6	12	8 7 7 6 6 5	4	***	6.0
1 1/2	6	12	6	4		7.3
1 %	5 1/2			4		8.3
1 34	5		5	4 1/2		9.63
1 %	5		4 1/2	4 1/2		10.73
2	4 1/2		4 1/2	4 1/2		12.2

#### NUT TAPS MORSE

A222222235555555252222222222222

HEFERETTERS OF THE PROPERTY OF MYDAMCO

No. 1050-Carbon Steel No. 2050-High Speed Steel U. S. Standard Thread furnished unless otherwise specified. High Speed Taps furnished in U. S. S. and S. A. E. Threads only. All other High Speed Taps are special. All Left Hand Taps are special.

	Es	eh	No.	of Threa		Whole	Length
Diam., Inches	Carbon Steel	High Speed Steel	U. S. Std.	S. A. E. Std.	Whit- worth Std.	Length, Inches	Thread Inches
1s	\$.0.60		24, 32		24	4 1/2	11/4
1/4	.60	8 1.50	20	28	20	5	1 %
16	.70	1.70	18	24	18	5 1/2	128
36	.80	2.00	16	24	16	6	216
15	. 90	2.40	14	20	14	6 1/2	244
1/2	1.00	2.70	13	20	12	7	258
18	1.15	7.17	12	18	12	7 1/2	2 5 2 2 5 2
58	1.35	4.05	11	18	11	8	2 8 2
12	1.60	2.0	11	16	11	8 1/2	281
34	1.85	5.65	10	16	10	9	3 14
13	2.15		10		10	9 1/2	3 1/4
18 7/s	2.45	7.90	9	14, 18	9	10	3 55
15	2.80		9		9	1036	3 8 2
1	3.15	10.55	8	14	8	11	416
1 1/8	3.70		7	12	7	1136	4 5 5
114	4.50		7	12	7	12	4 8 8
1 %	5.50		6	12	6	12 1/2	5 1 2
1 1/2	6.75		6	12	6	13	511
1 %	8.00		5 1/2		5	13 1/2	5 1/2
1 34	9.25		5		5	14	5 1/2
1 %	10.75		5		4 1/6	14 1/2	6 1/8
2	12.25		4 1/2		4 16	15	6 1/8
21/8	14.00		4 1/2		4 1/2	15 1/2	6 1/8
21/4	15.75		4 1/2		4	16	6 1/8
2 %	17.75		4		4	161/2	6 3/8
2 1/2	20.00		4		4	17	6 %

#### STOVE BOLT TAPS MORSE



No. 1076-Carbon Steel Furnished in Plug Style only, Left Hand Taps are special.

Diameter, Inches..... 34 16 24 Threads Per Inch..... 18 16 18 Each \$0.40 . 45 . 50 . 55 Per Dozen 4.80 5.40 6.00 6.60

#### PATCH-BOLT TAPS MORSE



No. 1125—Carbon Steel

These Taps all have a whole length of 3 1/2 in. They are made especially for boiler makers and have a taper of % in, to the foot for the purpose of making the bolt a steamtight fit.

United States Standard form of thread furnished unless otherwise specified.

Sizes, lengths and threads not listed are subject to special prices. Left Hand and Taps with V form of thread are

special.				
Diameter Tap, Inches 1/2	77	54	11	%
Thds, Per Inch, U.S.F. 12	12	12	12	12
Each \$1.00	0 1.10	1.25	1.45	1.70
Diameter Tap, Inches	- <del>1</del> 5	74	15	1
Threads Per Inch, U.S.F	. 12	12	12	12
Each	. \$1.95	2.25	2.40	2.80
Diameter Tap, Incnes	1 1/4	1 1/4	1.4	1 34
Threads Per Inch, U.S.F	. 12	12	12	12
Each	89 00	9 00	9 45	9 95

# BENT SHANK TAPPER TAPS

# HTDAMEO .....

#### No. 1074—Carbon Steel

Always give diameter and machine size when ordering. Left Hand Taps are special.

Dia.,			ads to	Size of		gth id, In.	Length Before
Inches	Each	U.S. Std.	S. A. E. Std.	Ma- chine	U. S. Std.	S. A. E. Std.	Bending Inches
1/8 1/4	\$0.65 .65 .65	$\frac{40}{24}$	28	1/4 1/4 1/4	11 32 15	32	6 % 6 % 6 %
14 18 98	.70 .80 .90	$\frac{20}{18}$ $\frac{16}{16}$	28 24 24	3/8 3/8 3/8	1 1/8 1 1/4	1 ½ 1 ½ 1 ½	8 % 8 % 8 %
3/8 1/2	.95 1.05 1.15	$\frac{16}{14}$ $\frac{13}{13}$	24 20 20	1/2 1/2 1/2	1 % 1 ½ ½ 1 ½ ½	1 %2 1 %3 1 %3	11 % 11 % 11 %
78 5% 3%	1.55 1.75 2.10	12 11	18 18 16	5% 5% 5%	1 13 2	135 1% 134	15 15 15

## TAPS FOR BEAMAN & SMITH HOLDERS MORSE



No. 1102—Carbon Steel No. 2102—High Speed Steel Furnished regularly U. S. Standard Thread. Plug Style Left Hand Taps and Length and Threads not listed are special and subject to special prices. Prices of Taps fitting Nos. 2½ and 3 Holders on application.

	Carbon Steel Each		High Speed Steel,		Threads to Inch			Whole
Dia. Tap, Inches	Fit- ting No. 1 H'lder	Fit- ting No. 2 H'lder	Fitting No. 1 Holder		U. S. Std.	S. A. E. Std.	Sh'nk,	Whole Lgth., Inches
1/4	\$0.55		\$1.30		20	28	3/8	2 3/4
Yo	. 55		1.35	******	18	24	3/8	3
3/8	. 55		1.40		16	24	3/8	3 1/4
70	.75		1.90		14	20	1/2	3 1/2
3/8 1/6 1/2	.75		1.95		13	2.0	1/2	3 %
24	.80		2.35		12	18	1/2	4
56	.90		2.70		11	18	1/2	4
5%		\$1.20		\$3.50	11	18	3/4	4
11		1.20		3.60	11	16	34	4 1/8
3/4		1.20		3.80	10	16	3/4	4 76
13		1.50			10		3/4	4 %
7/8		1.60			9	14, 18		510
7/6 12		1.80			9			5 %
1		2.20			8	14	3/4	5 11

## STAY-BOLT TAPS



No. 1130-Carbon Steel

In ordering, state diameter, pitch, and form of thread, also lengths of parts A, B, C, D and E.

U. S. Standard form of thread furnished unless otherwise specified.

Diameter given is that of the thread at its straight part.

Blank order slips furnished on application. 1 1/4 Diameter, Inches.... 34, 12 7/8 .60 Per Inch ..... \$0.40 . 65 . 45 . 50 .55 1 7 1 1/2 114 15 1% Diameter, Inches.... 1 3 Per Inch ..... \$0.70 .85 .90 .95 .75 .80

Stay-Bolt Taps 20 in. and 24 in. long in sizes from % to 1½ in. diameter, having the following proportions, will be considered regular; all others will be considered special.

we come		eu reguiar,	A	В	C	D	E
Length	20	in	1	6 -	1 1/2	6	5 1/2
		in	1	8	2	6	7
		in	1	10	2	6 1/2	7 1/2

# PIPE TAPS

MORSE



Taper.

No. 1115—Carbon Steel No.

No. 2115-High Speed Steel



Straight.

No. 1118-Carbon Steel

American (Briggs) Standard Right Hand Taper Pipe Taps are furnished unless otherwise specified.

High Speed Taps regularly furnished Right Hand, Taper Style only. Left Hand Taps take different discount from Right Hand.

Pipe Size, Inches	Carbon Steel, Each	High Speed Steel, Each	Threads to Inch	Length Thread Inches	Length, Inches
36	\$ 1.00	8 1.10	27	3/4	2 1/8
	1.20	1.50	18	1 16	274
34 96	1.60	1.95	18	170	2 %
16	2.00	3.10	14	1 %	3 1/6
34 34	2.80	4.40	14	1 %	3 1/4
1	4.40	7.80	111/2	1 %	3 %
1 34	5.00	12.10	111/2	1%	4
1 36	6.60	16.60	111/2	1 %	4 1/4
2	10.00	27.25	111/2	1 %	4 1/2
2 1/2	15.00		8	2-8	5 1/2
3	22.50		8	2 %	6
3 16	30.00		8	2 11	6 1/2
4	45.00		8	2 %	6 34

# PIPE REAMERS



No. 1116-Carbon Steel

These Pipe Reamers are tapered ¾ of an inch to the foot and are for reaming holes to be tapped with American (Briggs) Standard Taper Pipe Taps.

Sizes and dimensions not listed are subject to special prices.

# COMBINED PIPE TAPS AND DRILLS



No. 1110—Carbon Steel

 $1\,\%$  in, long. Shanks for sizes 2 to 3 in, are % in, by 1 in, and 2

The above tools furnished with special shanks fitting Pipe Tapping Machines on receipt of order and sketch giving necessary data. Prices quoted on application. F

#### TAP WRENCHES G. T. D. ADJUSTABLE



				THURS BY	of other		
Tine 7	Tool	Steel	Jaws,	Drop	Forged Steel	Body,	Welded.
s				00	0	4	5

Nos Capacity (Tap Sizes)-Hand, Inches..... 16 to 16 to 14 16 to % 1 to 1/2 Machine Screw.... 0 to 13 0 to 18 0 to 24 10 to 30 % to ¼ 1/8 Pipe ..... .... Length, Inches..... 5 9 11 Weight, Oz. . . . . . . . 4 12 1 1/2 3.50 Each ..... \$1.75 2.00 3.00 Nos. . . 7 1/2 8 6 7 % to 1 % to 1 1/4 % to 1 1/2 Machine Screw.... 14 to 30 15 to 30 22 to 30 Pipe ..... 1/8 to 3/8 % to % % to % % to 1 Length, Inches..... 15 19 31 40 Weight, Lbs. . . . . . . . 3 3 16 4 1/2 8 Each ..... \$4.00 5.00 6.50 8.00 One in a Box.

#### MORSE ADJUSTABLE



2 A B C . . . . . . . . . % to 18 % to 1% % to 1% For Reamers, Inches. . 16 to 15 ¼ to 計 % to 1計 計 to 1計 Opening, Inches . . . .  $\frac{76}{16}$ Length, Inches . . . . .  $8\frac{1}{2}$ 34 1 12% 17% 23 4.00 3.00 5.00 E F D 2 1/8 to 3 1/8 For Hand Taps, In . . . 1 1/4 to 2 1/6 1% to 2% For Reamers, Inches. 1  $\frac{1}{10}$  to  $2\frac{1}{10}$ 1% to 21/2 2 1/8 to 3 1 % 2 Opening, Inches . . . . . 134 56 Length, Inches..... 45 14 50 Weight Each, Lbs.... 20 10 15 \$15.00 47.50 62.50Each ..... Sizes D, E and F have handles that screw into body.

#### One in a Box. MORSE LIGHT ADJUSTABLE



No. 1145—Forged Steel Polished	
Size 0	1
For Hand Taps, Inches 16 to 14	To to Te
For Reamers, Inches 1/8 to 1/2	1/2 to 1/2
Opening, Inches	3/4
Length, Inches 5 1/8	6
Weight Each, Oz 6	7
Each \$1.60	2.00
One in a Box.	

# STARRETT ADJUSTABLE



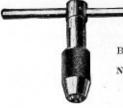
For Round or Square Shank Tools Polished Steel. Will hold Taps, Drills and Reamers.

No. 174-3 in, Long, Opens 1/4 in., Weight Each 3 Oz. \$0.60 Six in a Box.



For Round or Square Shank Tools Polished Steel, Knurled Grip, with Spring Adjustment. 91B Capacity Square, Inches..... \$4 to \$2 11 to 14 弘 Capacity Round, Inches..... 9 Length, Inches ..... 6 Each ..... No. 91A, Three; No. 91B, One in a Box.

#### TAP WRENCHES G. T. D. ADJUSTABLE



## With Solid Handle

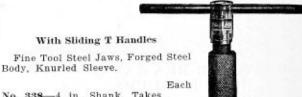
Fine Tool Steel Jaws, Forged Steel Body, Knurled Sleeve.

Each

No. 329-2 1/2 in. Shank, Takes 16 to 32 in. Hand Taps and 

No. 333-3 % in. Shank, Takes 16 to 1/2 in. Hand Taps and Nos. 14 to 30 Machine Screw Taps. . . . 1.25 Six in a Box.

#### G. T. D. RATCHET



No. 338-4 in. Shank, Takes  $\frac{1}{16}$  to  $\frac{9}{32}$  in. Hand Taps and Nos. 0 to 18 Machine 

Each

No. 339-4 % in. Shank, Takes of to 1/2 in. Hand Taps and Nos. 12 to 30 Machine Screw Taps. . . . \$2.50 Six in a Box.

#### YANKEE RATCHET



Right and Left Hand and Rigid

Tool Steel Ratchets and Pawl, Hardened Steel Jaws Polished.

Each No. 251-Length Over All 5 in., Outside Diameter of Chuck 1/2 in., Holds Up to 1/2 in. Taps, Weight Per Dozen 8 1/2 Lbs......\$2.75

No. 1251 - Length Over All 13 in., Weight Per Dozen 

The Knurled Thumb Piece at top of wrench affords a ready means of starting in and backing out the tap quickly. In the end of this thumb piece is a countersunk hole to use the tap wrench on lathe center when desired for holding small drills, etc. The cross arm can be readily withdrawn.

One in a Box.

#### GOODELL-PRATT

#### With Solid Handles

Polished Steel, long Knurled Shell giving firm grip, Forged Steel Jaws, hardened and tempered, so designed that they will not break with any ordinary work.



the state of the s	
Nos	89
Capacity, Inches	3/8
Length Handle, Inches 3 1/2	4 1/2
Weight Each, Lbs	4 1/2
Each \$0.65	.85

One in a Box.

# ROUND ADJUSTABLE DIES

MORSE



U. S. Standard Thread Furnished Unless Otherwise Specified

Left Hand Dies are special.

Sizes, dimensions and threads not listed are subject to special prices.

#### Carbon Steel

	Number	r of Thre	ads to Inch	No. 1185	No. 1187	No. 1180
Cutting Size, Inches	U. S. Std.	S. A. E.	U. S. Threads Also	213	ide Dian Each	
			Furnished	% Inch.	11 Inch	1 Inch.
18	64		72	\$0.80	80.90	
16	6.0		7.2	.70	.80	
53 51 1/8 84	50		48	. 60	. 70	
10.2	48			. 50	. 60	
1/8	4.0		3.2	. 50	.60	80.75
84	40			.50	. 60	. 75
33	36		32	. 50	. 60	. 75
11	32	******		. 50	. 60	. 75
14	24		32	. 50	. 60	. 75
15 15	24			. 50	. 60	. 75
22 22 15	24		3.2	. 50	. 60	. 75
15	24			. 50	. 60	. 75
1/4	20	28	24, 27, 32	. 50	. 60	. 75
16	18	24	20, 27, 32		. 60	. 75
16 % 16	16	24	20, 27			.75
10	14	20	24, 27			. 75

#### Carbon Steel

Cut-	No. of	Threa	ds to Inch.	No.1196	No. 1200	No.1203	No. 1207
ting Size,	U.S.	S. A. E.	U. S. Threads	Out	side Din	neter, E	ach,
Inches	Std.	Std.	Also Furn'sh'd	1 ⅓ In.	1½ In.	1% In.	1% In.
1/4	20	28	24, 27, 32	\$1.25	81.25	81.50	\$2.00
16	18	24	20, 27, 32	1.25	1.25	1.50	2.00
% 16	16	24	20, 27	1.25	1.25	1.50	2.00
76	14	20	24, 27	1.25	1.25	1.50	2.00
1/2	13	20	12, 24, 27	1.25	1.25	1.50	2.00
76 56	12	18	27		1.25	1.50	2.00
96	11	18	12, 27		1.25	1.50	2.00
116	11	16					2.00
34	10	16	12, 27				2.00

Cut-	No. of	Threa	ds to Inch.	No.1211	No. 1214	No.1217	No.1220
ting Size,	U.S.	3. A. E.	U. S. Threads	Out	side Din	neter, E	ach,
nches	Std.	Std.	Also Furn'sh'd	2 In.	21/4 In.	2½ In.	3 In.
1/4	20	28	24. 27. 32	\$2.00	\$3.00		
16 % 16	18	24	20, 27, 32	2.00	3.00		
3%	16	24	20, 27	2.00	3.00		
70	14	20	24, 27	2.00	3.00		
1/2	13	20	12, 24, 27	2.00	3.00	\$3.00	
16 5/8	12	18	27	2.00	3.00	8.00	
5/8	11	18	12, 27	2.00	3.00	3.00	
11	11	16		2.00	3.00	3.00	
3/4	10	16	12, 27	2.00	3.00	3.00	*****
18	10			2.00	3.00	3.00	
7/8	9	14, 18	12, 27	2.00	3.00	3.00	\$5.00
15	9				3.00	3.00	5.00
	8	14	12, 27		3.00	3.00	5.00
1%	7	12					5.00
14	7	12					5.00
1%	6	12					5.00
1/2	6	12					5.00

# ROUND ADJUSTABLE DIES

MORSE MACHINE SCREW



A. S. M. E. Standard

Left Hand Dies are special. Sizes, dimensions and threads not listed are subject to special prices.

#### Carbon Steel

Size of	Stand-	Threads	No. 1191	No. 1192	No. 1193
Screw	ard No.	Also	-	Each	
Gauge	of Thr'ds	Furnished	% Inch Diam.	il Inch Diam.	1 Inch Diam.
0	80		80.80	80.90	
1	7.2	56, 64	.80	.90	
2	64	5.6	.70	.80	
3	56	48	. 60	.70	
4	48	32, 36, 40	. 50	. 60	
5	4.4	36, 40	.50	. 60	
6	4.0	32, 36	. 50	. 60	80.75
7	3.6	30, 32	. 50	. 60	. 75
8	36	30, 32, 40	. 50	. 60	. 75
9	32	24, 30	. 50	. 60	.75
10	3.0	24, 28, 32	. 50	. 60	. 75
12	28	24, 32	. 50	.60	.75
14	24	20	. 50	. 60	.75
16	22	18, 20		. 60	. 75
18	20	18		. 60	. 75
20	2.0	16, 18		. 60	.75

#### For Brass Pipe

Cutting	Thread	No. 1250 Fitting Stock No. 23,	No. 1251 Fitting Stock No. 25.	No. 1252 Fitting Stock No. 27.
Size		1 in. Diam.	1 ¼ in. Diam. √a in. Thick.	1 % in. Diam.
1/4	27, 40	80.75		
14 16 36 16 16	27, 40	.75		
3/8	27, 40	.75		
15	27, 40	. 75		
1/2	27, 40	. 75		
56	27.40		81.50	
74	27, 40			81.75

## SOLID ROUND DIES

#### MORSE



No. 1175-Carbon Steel

Left Hand Dies are special. U. S. form of thread always furnished unless otherwise ordered.

Whitworth Standard threads furnished if desired.

Sizes and threads not listed are subject to special prices.

Diam., Inches ness, Inches 14	Size of Die Cutting Size			
12. 28; 14, 24  14. \$\frac{1}{16}\$, \$\frac{1}{	Diam., Inches	ness.	(2000-2000-2000-2000-2000-2000-2000-200	Each
%     ¼     ¼     ½     ¾     ½     ½     ½     ½     ¾     ½     ¾     ½     ¾     ½     ¾     ½     ¾     ¾     ½     ¾ <td>96</td> <td>1/4</td> <td></td> <td>80.40</td>	96	1/4		80.40
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	54	1/4		.40
1 % ¼, ¼, ¼, ¼, ½, ½, %, ⅓ 2 ¼ ¾ ¼, ¼, ⅓, ⅓, ½, ½ 2 ¼ ¾ ¼ Å %	1	3/8		. 73
2 14	1 %	16	fg. 14. fg. 38. fg. 12	1.23
2 1/4   3/4   1/6   3.	2 14	16		3.00
9.1/4 3/4 5/4 3.	2 14	3/4	A. 16, 78, 16, 72	3.00
# 74	2 1/4	34	58	8.00
	2 1/4	74	34	3.00
		74	76	3.00

# SOLID SQUARE BOLT DIES

MORSE



No. 1165-Carbon Steel

All sizes and threads not listed will be considered as special and subject to special prices.

United States form of thread always furnished unless otherwise ordered.

Cutting	Threads	Outside 1	Dimensions	
Size, Inches	to Inch U. S. S.	Size of Square, Inches	Thickness, Inches	Each
1/4	2.0	2 1/2	1/2	\$1.80
1/4 1/4 3/8	18	2 1/2	3/2	1.80
3/4	16	2 1/2	1/2	1.80
10	14	2 1/2	1/9	1.80
1/2	13	2 1/2	3/4	1.80
	12	2 1/2	34 34	1.90
1°s 5%	11	2 1/2	3/4	2.00
10	11	2 1/2	34	2.10
34	10	2 1/2	94 94	2.20
12	10	2 1/2	34 34	2.30
7/8	9	2 1/2	34	2.40
18	9	2 1/2	34	2.55
1	8	2 1/2	1	2.70
1 1/8	7	2 1/2	1	3.00
1 1/4	7	2 1/2	1	3.30
1 %	6	2 1/2	1	3.60
1 1/2	6	3	1	3.90
1 %	5 1/2	3	1	4.20
1 34	5 5	3	1 1/4	5.40
1 %	5	3 1/2	1 1/2	6.50
2	4 1/2	3 1/2	2	7.50

#### SOLID PIPE DIES

MORSE

No. 1170—Carbon Steel

Briggs Standard, Taper ¾ inch to the foot. Left Hand Dies and Sizes, Dimensions and Threads not Listed are Subject to Special Prices.



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Cutting Size Pipe, Inches	S	9	u	a	r			S	i, q	u	in	e,			S	Ñ	u	n ar ir	re L		Г	S	猫	u	n.	e		0.0	30	i qu	100	n.	e		П	S	91	12	n.	e L
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\*These Dies are thick enough to cut American (Briggs) Standard.

### SQUARE PIPE DIES

Q AND E

With Inserted Tool Steel Chasers.

Note-State Size when Ordering.

# SCREW PLATE DIES

No. 1155-Carbon Steel



All Sizes of Dies not listed and Dies with other than standard number of threads per inch furnished at special prices.

U. S. form of thread always furnished unless otherwise ordered.

S. A. E. Standard threads furnished at regular prices.

Size	Per Pair	Cutting Sizes, Inches
No. 1	\$0.40	1 to 1/4 by 32nds.
A	1.00	¼ to % by 16ths.
В	1.25	¼ to % by 16ths.
C	1.75	% to 1 by 16ths.
D	2.00	% to 1 by 16ths, 1% to 1% by
		8ths.
E	3.00	1% to 2 by 8ths.

## DIE HOLDERS

MORSE



No. 1051-For Holding No. 1155 Style Dies.

Size	Each	Length, Inches	Capacity, Inches
No. 1	81.60	6 1/2	to 1/4
A	2.50	13 %	14 to 56
В	3.25	19	1/4 to 3/4
C	4.00	21 %	% to 1
D	5.00	28%	10 to 1 1/2
E	15.00	40 %	1 % to 2

MORSE



No. 1180-For Holding Round Dies.

			Hoding R	ound Dies
Size	Each	Length, Inches	Outside Diam., Inches	Thick- ness, Inches
21	\$0.40	5	9%	34
22	.50	7 %	18	3/4
23	1.00	10 14	1	36
25	1.25	12 1/8	1.5	To
26	1.25	14 1/6	1 1/2	1/2
27	1.50	14 1/8	1 //	10
28	1.50	18	1 %	**
29	1.50	22	2	5/8
30	1.75	26	2 14	34
31	1.75	30	2 1/2	3/4
32	2.25	42	3	1

# SCREW PLATES



	Style 1159-Without Taps,	Per Set
vo.	5-Plate A, with 3 Pair Dies, Cutting 14-20,	
	%-16, ½-13s	5.00
vo.	6-Plate B, with 4 Pair Dies, Cutting 3/8-16,	
	1/2-13, 5%-11, 3/4-10	8.00
vo.	7-Plate C, with 4 Pair Dies, Cutting 1/2-13,	
	%-11, %-10, %-9	10.00
vo.	8-Plate D, with 4 Pair Dies, Cutting 78-9, 1-8,	
	1%-7, 1%-7	13.00
Vo.	9-Plate E, with 6 Pair Dies, Cutting 1 %-6,	
	1 1/2-6, 1 1/3-5 1/2, 1 1/3-5, 1 1/3-5, 2-4 1/2	33.00

One Set in a Box.

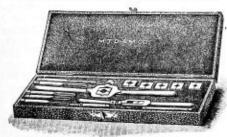
MORSE



#### Style 1161-U. S. Standard Thread

		er Set
No.	10—3 Sizes, Plug Taps and Dies, Cutting ¼-20, ¾-16 and ½-13 Threads, with 6½ in. Stock\$	6.80
No.	11—Same as Set No. 10 with 12 % in. Adjustable Tap Wrench	9.80
	12—4 Sizes, Plug Taps and Dies, Cutting $\frac{1}{4}$ -20. $\frac{3}{6}$ -16, $\frac{1}{2}$ -13 and $\frac{5}{8}$ -11 Threads, with $6\frac{1}{2}$ in. Stock	8.50
No.	13—Same as Set No. 12 with 12 % in. Adjustable Tap Wrench	11.50
No.	14—4 Sizes, Plug Taps and Dies, Cutting $\frac{1}{8}$ -16, $\frac{1}{2}$ -13, $\frac{5}{8}$ -11 and $\frac{5}{4}$ -10 Threads, Complete with 19 in. Stock.	11.00
No.	15—Same as Set No. 14 with One Each 12 % and 17 % in. Adjustable Tap Wrenches.	
No.	16—6 Sizes, Plug Taps and Dies, Cutting $\frac{1}{4}$ -20. $\frac{3}{8}$ -16, $\frac{1}{2}$ -13, $\frac{5}{8}$ -11, $\frac{3}{4}$ -10 and $\frac{3}{8}$ -9 Threads, with 19 in. Stock	
No.	17—Same as Set No. 16 with One Each 12 ¾ and 17 ¼ in. Adjustable Tap Wrench	
No.	$18-4$ Sizes, Plug Taps and Dies, Cutting $\frac{1}{2}$ -13, $\frac{5}{8}$ -11, $\frac{3}{4}$ -10 and $\frac{5}{8}$ -9 Threads, with 21% in Stock	14.25
No.	19—Same as Set No. 18, with 17 % in. Adjustable Tap Wrench.	18.25
No.	20—6 Sizes, Plug Taps and Dies, Cutting $\%$ -16, $\frac{1}{2}$ -13, $\frac{5}{8}$ -11, $\frac{3}{4}$ -10, $\frac{7}{8}$ -9 and 1-8 Threads, with	10.00
No.	21% in. Stock	
No.	and 17 % in. Adjustable Tap Wrenches	26.25
	1-8, 1%-7 and 1%-7 Threads with 28% in. Stock	20.10
	23—Same as Set No. 22, with 23 in. Adjustable Tap Wrenches	25.10
No.	24 5 Sizes, Plug Taps and Dies, Cutting %-9. 1-8, 1 1/4-7, 1 1/4-7 and 1 1/6-6 Threads, with 28 1/4	
No.	in. Stock	
	Tap Wrench	31.00

#### MORSE SMALL FRACTIONAL SETS



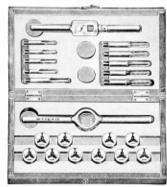
#### Style 1158-For Model Makers and Jewelers Use Per Set No. 1-5 Sizes Plug Tans and Dies. Cutting 14-40.

Wrench, in Morocco Case...... 6.75

110.	1-5 Sizes, Flug Taps and Dies, Cutting 78-40,	
	\$2-36, \$3-24, \$3-24 and \$4-20 Threads, with 6 \$4	
	in. Stock, in Wooden Box	§4 . 50
No.	2-Same as Set No. 1, with 6 in. Adjustable Tap	
	Wrench	6.00
No.	3-6 Sizes, Plug Taps and Dies, Cutting 10-64,	
	1/8-40, 3/2-36, 1/3-24, 3/2-24 and 1/4-20 Threads,	
	with 61/2 in. Stock and 6 in. Adjustable Tap	
	War 1 to Marcon Conn	6 75

## SCREW PLATES

MORSE ROUND ADJUSTABLE DIE



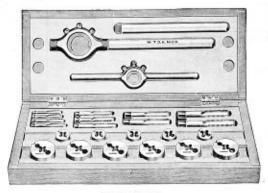
3	Style 1264—Fractional Sizes 13 in. Diameter Dies Per Set
No.	51—5 Sizes, Plug Taps and Dies, Cutting $\frac{1}{3}$ -26, $\frac{1}{3}$ -24, $\frac{1}{3}$ -24 and $\frac{1}{3}$ -20 Threads, with 7% in. Stock and 5% in. Adjustable Tap Wrench\$5.75
No.	52—6 Sizes, Plug Taps and Dies, Cutting $\frac{1}{3}$ -40, $\frac{1}{3}$ -36, $\frac{1}{3}$ -24, $\frac{1}{3}$ -24, $\frac{1}{4}$ -20 and $\frac{1}{3}$ -18 Threads, with 7% in. Stock and 6 in. Adjustable Tap Wrench 6.50
No,	53—5 Sizes, Plug Taps and Dies, Cutting $\frac{1}{16}$ -64, $\frac{1}{16}$ -40, $\frac{1}{16}$ -24, $\frac{1}{14}$ -20 and $\frac{1}{16}$ -18 Threads, with 7% in. Stock and 6 in. Adjustable Tap Wrench 5.75
No.	54—8 Sizes, Plug Taps and Dies, Cutting $\frac{1}{16}$ -64, $\frac{3}{2}$ -50, $\frac{1}{8}$ -40, $\frac{4}{2}$ -36, $\frac{3}{6}$ -24, $\frac{3}{2}$ -24, $\frac{1}{4}$ -20 and $\frac{5}{6}$ -18 Threads, with 7 $\frac{3}{8}$ in, Stock and 6 in, Adjustable Tap Wrench
77.24	Tup William Collins of the Collins o
Si	yle 1265—A. S. M. E. Standard Machine Screw Sizes † in. Diameter Dies Per Set
No.	55-5 Sizes, Plug Taps and Dies, Cutting 4-48, 6-40, 8-36, 10-30 and 12-28 Threads, with 7 %
No.	in. Stock and 5 1/6 in. Adjustable Tap Wrench. 5.65 56—6 Sizes, Plug Taps and Dies, Cutting 4-48, 6-40, 8-36, 10-30, 12-28 and 14-20 Threads, with
No.	7% in. Stock and 5% in. Adjustable Tap Wrench 6.25 57—7 Sizes, Plug Taps and Dies, Cutting 4-48, 6-40, 8-36, 10-30, 12-28, 14-24 and 16-22 Threads, with 7% in. Stock and 5% in. Adjust-
No.	able Tap Wrench
12.27	Threads, with 7% in. Stock and 6 in. Adjustable Tap Wrench
No.	59—8 Sizes, Plug Taps and Dies, Cutting 2-64, 3-56, 4-48, 6-40, 8-36, 10-30, 12-28 and 14-24 Threads, with 7% in. Stock and 5% in. Adjust-
No.	able Tap Wrench
	and 18-20 Threads, with 7% in. Stock and 6 in. Adjustable Tap Wrench
3	Style 1268—A. S. M. E. Machine Screw Sizes, 1 in. Diameter Dies
	Without Tap Wrenches. Per Set
Va	er t Siece Plug Tons and Dies Cutting 12-

	Without Tap Wienches. Per Set	
No.	67-5 Sizes, Plug Taps and Dies, Cutting 12-	
	28, 14-24, 16-22, 18-20 and 20-20 Threads, with	
	10 1/4 in. Stock	
No.	68-4 Sizes, Plug Taps and Drills, Cutting 14-24,	
	16-22, 18-20 and 20-20 Threads, with 10 1/4 in.	
	Stock 5.00	
	Throad tin	

#### Style 1268—Fractional Sizes U. S. S. Thread, 1 in. Diameter Dies

	Without Tap Wrenches.	Per Set
No.	69—5 Sizes, Plug Taps and Dies, Cutting $\frac{1}{4}$ -20, $\frac{5}{16}$ -18, $\frac{3}{8}$ -16 and $\frac{7}{16}$ -14 Threads, with	10%
	in. Stock	\$6 . 60
No.	70-4 Sizes, Plug Taps and Dies, Cutting 5	4-20, 4 in.
	Stock	3.10

MORSE ROUND ADJUSTABLE DIE



No. 83 Set.

Style 1271—U. S. Standard Threads	Style 1285—U. S. Standard Threads
	2 Inch Diameter Dies Per Set
1 ½ Inch Diameter Dies  Per Set  No. 79—5 Sizes, Plug Taps and Dies, Cutting ¼-20, ½-18, ½-16, ½-14 and ½-13 Threads with 12 ½ in. Stock\$8.40	No. 102—7 Sizes, Taper Taps and Dies, Cutting \( \frac{1}{4} \times 20, \\ \frac{1}{6} - 18, \\ \frac{3}{8} - 16, \\ \frac{1}{16} - 14, \\ \frac{1}{2} - 13, \\ \frac{3}{8} - 11 \text{ and } \\ \frac{3}{4} - 10 \text{ Threads, with Stock } 22 \text{ inches Long, without Tap Holder}
No. 80—4 Sizes, Plug Taps and Dies, Cutting $\frac{1}{4}$ -20, $\frac{1}{16}$ -18, $\frac{3}{8}$ -16 and $\frac{3}{2}$ -13 Threads, with $\frac{12}{12}$ in. Stock, without Tap Wrench	No. 103—Same as Set No. 100 with 12 ¾ in. Adjustable Tap Wrench
No. 81—3 Sizes, Plug Taps and Dies, Cutting ¼-20, %-16 and ½-13 Threads, with 12 ½ in. Stock, without Tap Wrench 5.75	2½ inch Diameter Dics Per Set  No. 114—5 Sizes, Taper Taps and Dies, Cutting ½-13, %-11, %-10, %-9 and 1-8 Threads, with 30 inch Stock, without Tap Wrench
Style 1274—S. A. E. Standard Threads	No. 115—Same as Set No. 114, with 17 1/2 in. Adjustable Tap Wrench
1 is Inch Diameter Dies	Style 1291—U. S. Standard Threads
No. 82—5 Sizes, Plug Taps and Dies, Cutting $\frac{1}{4}$ -28, $\frac{1}{16}$ -24, $\frac{3}{8}$ -24, $\frac{1}{16}$ -20 and $\frac{1}{2}$ -20 Threads, with 12 $\frac{1}{2}$ in. Stock, without Tap Wrench	No. 132—4 Sizes, Taper Taps and Dies, Cutting
With 1 % and 2 ¼ Inch Dies  Per Set	No. 133—Same as Set No. 132, with 23 inch Adjustable Tap Wrench
No. 83—11 Plug Taps and Dies Cutting ½-28, ½-24, %-24, ½-20, ½-20, ½-18, %-18, ½-16, ¾-16, ¾-14 and 1-14 Threads, with One Each 12½ and 26 inch Stocks	No. 138—6 Sizes, Taper Taps and Dies, Cutting %-9, 1-8, 1½-7, 1½-7, 1¾-6, 1½-6 Threads, with Stock 42 inches Long, without Tap Wrench 49.50  No. 139—Same as Set No. 138, with 23 inch Adjustable Tap Wrench 58.00
These sets have $1_{16}$ inch outside diameter dies for cutting Sizes $\frac{1}{4}$ to $\frac{1}{2}$ inch and $2\frac{1}{4}$ inch dies for cutting $\frac{1}{16}$ to 1 inch. The $12\frac{1}{2}$ inch Stock Holds $1\frac{1}{16}$ inch and the $26$ inch Stock Holds $2\frac{1}{4}$ inch Dies. No Tap Wrenches are furnished with this set.	Style 1293—U. S. Standard Threads With 2 and 3 Inch Diameter Dies Per Set No. 149—11 Sizes, Taper Taps and Dies, Cutting ½-20, ½-18, ½-16, ½-14, ½-13, ½-11, ¾-10, ½-9, ½-8, ½-7 and ½-7 Threads, with 22 and
Style 1277-U. S. Standard Threads	42 inch Stocks, no Tap Wrench
134 Inch Diameter Dies	No. 150—Same as No. 149 Set with 12% inch Adjustable Tap Wrench
No. 88—7 Sizes, Plug Taps and Dies Cutting $\frac{1}{4}$ -20, $\frac{1}{6}$ -18, $\frac{8}{8}$ -16, $\frac{7}{6}$ -14, $\frac{1}{2}$ -13, $\frac{8}{6}$ -11 and $\frac{3}{4}$ -10 Threads, with 18 in. Stock, without Tap Wrench	are 3 in. Diameter.  Style 1296—U. S. Standard Threads
No. 89—5 Sizes, Plug Taps and Dies, Cutting %-16, %-14, ½-13, %-11 and %-10 Threads, with 18 inch Stock, without Tap Wrench	No. 160—13 Sizes, Taper Taps and Dies, Cutting
No. 90—3 Sizes, Plug Tap and Dies, Cutting ½-13, %-11 and ¾-10 Threads, with 18 inch Stock, without Tap Wrench 9.25  Each of the above sets are put up in nicely finished	No. 161—Same as Set No. 160 with Three Adjustable Tap Wrenches, One Each 12%, 17% and
hinged wooden box with separate compartment for each Tap, Die and Holder.	

#### LITTLE GIANT Details of Little Giant Screw Plates



Adjustable Die.

Note the Beveled Edges.

Little Giant dies are made in two pieces, each piece having two cutting edges. The two pieces can be easily and quickly removed from the collet, and the cutting edges sharpened on a thin emery wheel.

The collet consists of a cap with slot beveled to the same angle as the edges of the die, and a screw guide. A small The Little Giant Two-Piece screw at the end of each slot allows adjustment to exact size.

After the die is placed in the cap the screw guide wedges it tight. Thus the die is held in a positive three-angle grip, and the whole (die and collet) is practically as rigid as a solid die.

Every Little Giant Screw Plate is put up in an oiled and varnished hardwood box.



Sectional View of Little Giant Die and Collet.



U. S. Standard Threads

Per Set

No. 1-5 Sizes Taper Taps and Dies, Cutting 1/4-20, 76-18, %-16, 76-14 and 1/2-13 Threads, 2 in. Diameter Collets, One 14 ½ in. Stock, One 11 ½ in. Adjustable Tap Wrench, One Bit Brace Shank, in Hardwood Case, Weight Per Set 9



U. S. Standard Threads

Per Set

No. 2-5 Sizes Taper Taps and Dies, Cutting 14-20, %-16, ½-13, %-11 and %-10 Threads, 2% in. Diameter Collets, One 23 in. Stock, One 15 in. Adjustable Tap Wrench, in Hardwood Case, Weight Per Set 17 Lbs......\$22.75

No. 3-4 Sizes Taper Taps and Dies, Cutting %-11 %-10, %-9 and 1-8 Threads, 2% in. Diameter Collets, One 26 in. Stock, One 19 in. Adjustable Tap Wrench, in Hardwood Case, Weight Per Set 

No. 4-5 Sizes Taper Taps and Dies, Cutting 1/2-13, %-11 %-10, %-9 and 1-8 Threads, 2 % Diameter Collets, One 26 in. Stock, One 19 in. Adjustable Tap Wrench, in Hardwood Case, Weight Per Set 20 ½ Lbs. 29.25



U. S. Standard Threads

Per Set

No. 5-7 Sizes Taper Taps and Dies, Cutting 1/4-20, 16-18, %-16, 16-14, ½-13, %-11 and ¾-10. Threads, 2¾ in. Diameter Collets, One 23 in. Stock, One 15 in. Adjustable Tap Wrench, in Hardwood Case, Weight Per Set 20 Lbs..... \$27.50 in special corrugated cartons for reshipping.



U. S. Standard Threads

Per Set

No. 51/2-8 Sizes, Taper Taps and Dies, Cutting 1/4-20, 1/6-18, 1/6-16, 1/6-14, 1/2-13, 1/6-12, 1/6-11, 34-10 Threads, 234 in. Diameter Collets, One 23 in. Stock, One 15 in. Adjustable Tap Wrench. in Hardwod Case, Weight Per Set 22 Lbs....\$30.75



U. S. Standard Threads

Per Set

No. 6-7 Sizes Taper Taps and Dies, Cutting %-16, 78-14, 1/2-13, 5%-11, 3/4-10, 7/8-9 and 1-8 Threads, 23/4 in. Diameter Collets, One 26 in. Stock, One 19 in. Adjustable Tap Wrench, in Hardwood Case, Weight Per Set 23 Lbs..... \$35.00



U. S. Standard Threads

Per Set

No. 7-9 Sizes Taper Taps and Dies, Cutting 4-20,  $\frac{7}{10}$ -18,  $\frac{3}{10}$ -16,  $\frac{7}{10}$ -14,  $\frac{3}{10}$ -13,  $\frac{3}{10}$ -11,  $\frac{3}{10}$ -10,  $\frac{7}{10}$ -9, and 1-8 Threads, 2 % in. Diameter Collets, One 26 in. Stock, Two Adjustable Tap Wrenches, 11½ and 19½ in. Long, in Hardwood Case, 

All Little Giant Screw Plates on this page are put up

#### LITTLE GIANT



#### U. S. Standard Threads

Per Set

No. 7½—10 Sizes Taper Taps and Dies, Cutting
¼-20, ½-18, ¾-16, ½-14, ½-13, ½-12,
¾-11, ¼-10, ½-9 and 1-8 Threads, 2¾ in.
Diameter Collets One 26 in. Stock, Two Adjustable Tap Wrenches 11½ and 19½ in.
Long, in Hardwood Case, Weight Per Set
29 Lbs. \*\*\*844.25\*\*

#### LITTLE GIANT AUTOMOBILE



#### S. A. E. Standard Threads

Universally adopted by the Automobile Manufacturers and no garage or auto repair shop should be without a screw plate containing these sizes.

Per Se



#### S. A. E. Standard Threads

No. 35—7 Sizes Plug Taps and Dies, S. A. E. Standard, Cutting ¼ x28, ½-24, ¾-24, ½-20, ½-20, ⅓-18 and ¾-16 Threads, 2¾ in. Diameter Collets, One 23 in. Stock, One 15 in. Adjustable Tap Wrench, in Hardwood Box, Weight Per Set 20 Lbs......................\$27.50



#### S. A. E. Standard Threads

Per Set

No. 37—9 Sizes Plug Taps and Dies, S. A. E. Standard, Cutting ½-28, ½-24, ½-24, ½-24, ½-20, ½-20, ½-18, ¾-16, ½-14, 1-14 Threads, 2¾ in. Diameter Collets, One 26 in. Stock, One 11 in. and One 19 in. Adjustable Tap Wrench, in Hardwood Box, Weight Per Set 27 Lbs....\$42.00

#### LITTLE GIANT COMBINATION

Little Giant Adjustable and Reversible Dies

#### Both U. S. Standard and S. A. E. Standard Threads

Each Assortment contains the following: U. S. Taper Taps, S. A. E. Plug Taps and Little Giant Dies for Each Size; 2 in. Diameter Collets for Sizes ½ in, and Smaller and 2 ¾ in. Diameter for Sizes % in. and Larger; Bit Brace Shank Fitting 2 in. Diameter Collets, in addition to Stocks and Taps Specified.



U. S. and S. A. E. Standard Threads

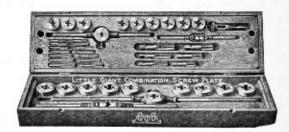
Per Set



U. S. and S. A. E. Standard Threads

Per Set

No. 311—16 Sizes Taps and Dies, 8 Sizes U. S. Standard ¼-20, ½-18, ¾-16, ½-14, ½-13, ½-13, ½-12, ½-11, ¾-10 and S. A. E. Standard ¼-28, ½-24, ¾-24, ½-20, ½-20, ½-18, ¾-18, ¾-16; Two Stocks 14½ and 23 in. Long, Two Adjustable Tap Wrenches 11½ and 15 in. Long, One Bit Brace Shank, in Hardwood Case, Weight Set 31 Lbs...\$56.00



U. S. and S. A. E. Standard Threads

Per Set

Little Giant Dies are made in two pieces, each piece having two cutting edges. The two pieces can be easily and quickly removed from the collet, and the cutting edges sharpened on a thin emery wheel.

All Little Giant Screw Plates on this page are put up in special corrugated cartons for reshipping.

14

20

# SCREW PLATES

LITTLE GIANT SINGLE STOCK



#### Small Fractional Sizes

	Daniel & Invitation Control	Per Set
No.	A1—5 Sizes Plug Taps and Dies, Cutting $\frac{1}{6}$ -40, $\frac{4}{62}$ -36, $\frac{4}{62}$ -24, $\frac{4}{3}$ -24 and $\frac{1}{4}$ -20 Threads, $1\frac{1}{4}$ in. Diameter Collets, One 7 $\frac{1}{2}$ in. Stock, One 7 $\frac{1}{2}$ in. Adjustable Tap Wrench, in Hardwood Case, Weight Per Set $2\frac{1}{2}$ Lbs	
No.	A1½—7 Sizes, Plug Taps and Dies, Cutting $\frac{1}{16}$ -64, $\frac{1}{36}$ -50, $\frac{1}{36}$ -40, $\frac{1}{32}$ -36, $\frac{1}{36}$ -24, $\frac{1}{32}$ -24, $\frac{1}{34}$ -20, Threads, 1¼ in. Diameter Collets, One 7½ in. Stock, One 7½ in. Adjustable Tap Wrench, in Hardwood Case, Weight Per Set 3 Lbs	14.50
No.	A2—7 Sizes Plug Taps and Dies, Cutting $\vec{v_4}$ -48, $\frac{1}{16}$ -40, $\vec{v_6}$ -40, $\vec{v_6}$ -26, $\vec{v_6}$ -24, $\vec{v_5}$ -24, $\frac{1}{14}$ -20 Threads, 1 $\frac{1}{14}$ in. Diameter Collets, One 7 $\frac{1}{12}$ in. Stock, One 7 $\frac{1}{12}$ in. Adjustable Tap Wrench, in Hardwood Case, Weight Per Set 3 Lbs	
No.	<b>A2½</b> —10 Sizes Plug Taps and Dies, Cutting $\frac{1}{16}$ -64, $\frac{3}{64}$ -60, $\frac{3}{62}$ -50, $\frac{7}{64}$ -48, $\frac{1}{36}$ -40, $\frac{3}{64}$ -24, $\frac{3}{25}$ -24, $\frac{1}{36}$ -24, $\frac{1}{36}$ -24, $\frac{1}{36}$ -24, $\frac{1}{36}$ -26 Threads, 1½ in. Diameter Collets, One 7½ in. Stock, One 7½ in. Adjustable Tap Wrench, in Hardwood Case, Weight Per Set 4 Lbs	
No.	A3—10 Sizes Plug Taps and Dies, Cutting $z_4^7-48$ , $\frac{1}{16}-40$ , $\frac{2}{34}-40$ , $\frac{2}{32}-36$ , $\frac{1}{44}-32$ , $\frac{2}{32}-24$ , $\frac{1}{44}-24$ , $\frac{2}{32}-24$ , $\frac{1}{42}-24$ , $\frac{1}{42}-20$ Threads, 1 $\frac{1}{4}$ in. Diameter Collets, One 7 $\frac{1}{2}$ in. Adjustable Tap Wrench, in Hardwood Case, Weight Per Set 4	
	Lbs.	19.50

### G. T. D. "BUTTON" DIE



### D Assortment (13 in. Diameter Dies)

Adjustable Round Split Dies and Plug Taps. Stock (61/4 in. long). Tap Wrench No. 340, made by inserting adjustable socket in stock.

Machine Screw Sizes	Per Set
No. D5-5 Sizes, 4-36, 6-32, 8-32, 10-24 Weight 1%, Lbs	. 12-24.
No. D6—6 Sizes, 4-36, 6-32, 8-32, 10-24 14-20, Weight 1¾ Lbs	, 12-24, , 9.00
No. D7—7 Sizes, 4-36, 6-32, 8-32, 10-24 12-24, 14-20, Weight 1% Lbs	, 10-32,
No. D10—10 Sizes, 2-56, 3-48, 4-36, 5-3 8-32, 10-24, 10-32, 12-24, 14-20, Weigh	6, 6-32, t 2 Lbs. 13.00

#### Fractional Sizes, 1 in. Diameter Die Per Set

No.	F6-6	Sizes,	1/4-40	, 3-24,	14-20,	ή-18,	%-16,	
	J-14	Stock	9 in.	Long. 9	in. A	djustab	le Tap	
	Wrench	Wei	ght 2	% Lbs.			\$12.	25

# PARTS FOR LITTLE GIANT SCREW PLATES

COLLETS





Cap.

# The Cap and Guide Form the Complete Collet

No. of Collet	2	5	20	25
Diam. Collet, Inches.		2 %	4	4 ½
For Size, Inches		14 to 1	% to 1 1/4	74 to 1 14
Collet Comp. Each,		1.30	2.25	3.00
Cap Each,		.80	1.50	2.00
Guide Each,		.50	.75	1.00

DIES ONLY



The die is bevelled on both sides to permit reversing the die so that work may be threaded either through the guide or from the face, determined by the character of the

work.					
Size, Inches	1/4	78	36	2/2	16
U.S.S. Thds. Per Inch.	20	18	16	14	12-13
S.A.E. Thds. Per Inch.	28	24	24	20	20
Per Pair	\$1.00	1.00	1.25	1.25	1.50
Size, Inches	16	56	34	36	1
U.S.S. Thds. Per Inch.	12	11	10	9	8
S.A.E. Thds. Per Inch.	18	18	16	14	14
Per Pair	\$1.50	1.75	2.00	2.75	2.75
Size, Inches		1 1/4	1 34	1 34	1 1/2
U.S.S. Threads Per Inch		7	7	6	6
Per Pair		\$4.00	4.00	5.00	5.00

#### PARTS FOR A1 AND AA4 SCREW PLATES

No. of Collet		eren e		A	1-1
Diameter of Collet, Inches.				1	3/4
For Fractional Sizes, Inche					to 14
For Machine Screw Sizes, 1					0 14
Collet Complete			Each,	\$0	. 55
Cap					.35
Guide			Each,		.20
DIES	ONLY				
Fractional Size, Inches	16	20	Per.	77.	14
Threads Per Inch	40	36	24	24	20
Per Pair	80.75	. 75	. 75	. 75	. 75

Mach. Screw Size, Nos.

#### 10 10 12 24 32 24 32 Threads Per Inch.... 36 32 24 Per Pair ...... \$0.75 .75 .75 .75 .75 .75 .75 DIE STOCKS



Knurled Steel Tube Handles

Stock	Accu	ratel	y	M	ac	h:	ined and	Highly	Finishe	d-
Nos								1	5	7
Length, It	iches						7 %	14 1/2	23	26
Each					4		\$0.75	2.50	3.50	3.50
Nos								9	20	25
Length, In	iches		-08	*				29	40	52
Each								83.50	6.00	8.00
				0	ne	i	n a Box.			

## PIPE STOCKS AND DIES

"TOLEDO" RATCHET PIPE THREADING DEVICE



#### For Threading Small Pipe

Per Set

This tool is very desirable for threading small sizes of pipe. It is the smallest and most compact pipe threader in existence today.

As the illustration indicates, it consists of a ratchet handle for holding a series of die heads, which heads also include a ratchet gear that forms the bushing for the given size of pipe. There is no possibility of going wrong with this tool.

One Set in a Box.

#### EXTRA DIE HEADS WITH DIES

#### To Fit No. 00 Threading Device

Sizes, Inches	16	34	34	36	34
Wt. Per Set. Oz	20	20	20	22	22
Per Set	\$3.00	3.00	3.00	3.50	3.50

### "TOLEDO" ADJUSTABLE PIPE THREADING DEVICES



#### With Receding Die Feature

Per Set

Very popular where a ratchet tool is not needed. Light and compact. Bushings are part of the regular equipment and simplify the centering of the tool on the pipe.

One Set of Dies is used for threading 1/8 in. pipe, a second Set for 1/4 and 3/8 in., and a third Set for 1/4 and 3/4 in. pipe.

One Set in a Box.

#### EXTRA DIES FOR No. 0 SET

Size, Inches	36	34 x 36	36 x 34
Weight Per Set, Oz	5	4	4
Per Set	82.50	2.50	2.50

"TOLEDO" ADJUSTABLE PIPE THREADING DEVICE



#### The Standardized Set

Per Set

No. 1—Capacity 1 to 2 in. Pipe Inclusive, Complete, Net Weight 19 Lbs., Shipping Weight 25 Lbs., \$24.00

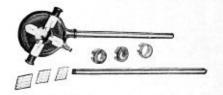
This model is looked upon by thousands of users as the peak of perfection in pipe threading tools. For years it has been the standard by which all other pipe threading devices have been compared, and nothing conceived later has taken its place.

One Set in a Box.

#### EXTRA DIES FOR No. 1 SET

Size, Inches	1	134	1 1/2	2
Weight Per Set, Oz		6	6	5
Per Set	\$2.50	2.50	2.50	2.50

# "TOLEDO" ADJUSTABLE RATCHET PIPE THREADING DEVICE



#### Used with One or Two Handles

Per Set

No. 1A—Capacity 1 to 2 in. Pipe Inclusive, Complete, Net Weight 22 Lbs., Shipping Weight 30 Lbs., \$30.00

The ratchet makes this tool ideal for threading pipe in the trench, between rafters, against walls or any place where the space is restricted. This feature coupled with the "Toledo's" rugged durability, makes it the most popular threader in the oil fields, and plumbers and steamfitters prefer this model because of this ratchet feature.

One Set in a Box.

#### EXTRA DIES FOR No. 1A SET

Size, Inches	1	1 14	1 16	2
Weight Per Set, Oz	7	6	6	5
Per Set	\$2.50	2.50	2.50	2.50

#### "TOLEDO" GEARED ADJUSTABLE PIPE THREADING DEVICE



The most practical, most durable, most easily operated and the most general all around satisfactory of all pipe threading devices in use today.

#### Will Thread a 4 inch Pipe in Less Than Ten Minutes

Per Set

#### EXTRA DIES FOR No. 2 SET

Sizes, Inches		3	3 1/2	4
Weight Per Set, Oz	34	3.2	28	26
Per Set	\$8.00	8.00	8.00	8.00

## PIPE STOCK AND DIES

#### BEAVERETTE



Plain, ¼ to ¾ Inch

Threads all sizes within its capacity without changing Dies or Bushings.

Per Set No. 6—Capacity 14 to 34 in. Pipe Inclusive, Net

Weight 8 1/2 Lbs., Shipping Weight 12 Lbs. . . . \$15.00

EXTRA	DIES	FOR	No.	6	Set
-------	------	-----	-----	---	-----

Size, Inches		$\frac{1}{2} - \frac{3}{4}$
Weight Per Set, Oz	9	9
Per Set		3.00
One Set in a Box.		

#### BEAVER



#### Plain, 1 to 2 Inch

Threads all sizes within their capacity without changing dies. They are adjustable and are built on the receding die principle which enables one man to thread any size of pipe and produce absolutely tight joints for all work.

Per Set

No. 25—Capacity 1 to 2 in. Pipe Inclusive, Net Weight 22 Lbs., Shipping Weight 30 Lbs.....\$30.00 One Set in a Box.



#### Ratchet, 1 to 2 Inch

This set is of the same construction and design as the No. 25 outfit described above with the added advantage of a ratchet. With ratchet tools the operator can choose his position and utilize his weight to best advantage in threading pipe in ditches, against ceilings, in corners, etc.

No. 26—Capacity 1 to 2 in. Pipe Inclusive, Net Wt. 27 Lbs., Shipping Weight 35 Lbs.......\$35.00

#### EXTRA DIES FOR Nos. 25 AND 26 SETS

Size, Inches	1	1 34	1 1/2	2
Weight Per Set, Oz	10	10	10	10
	\$3.50	3.50	3.50	3.50
One Set	in a B	ox.		

#### BEAVER GEARED

#### Capacity 214 to 4 Inches

The Beaver receding die principle is used in connection with a gear. A steel driving pinion turns the tool through the intermediary of a larger gear, the ratio of which is about 6 to 1. It is the combination of these two features that make it possible for one man alone to thread large pipe.



Don C

One set of dies threads all sizes, and is adjustable to cut standard, oversize or undersize, insuring tight-fitting joints regardless of any variation in fittings.

One Set in a Box.

#### BEAVER JUNIOR

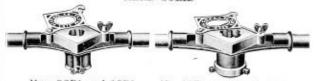


With Ratchet Handle and Individual Die Heads Can be operated close to ceilings, corners, etc.

EXTRA DIES FOR Nos. 3A AND 3B SETS

Size, Inches..... 18 14 38 14 34 1 1 Weight Set, Lbs. 34 34 34 34 1 1 14 1 15 Per Set ...... 83.00 3.00 3.00 3.50 3.50 4.00 One Set in a Box.

#### REED SOLID



Nos. OSP1 and 1SP1. No. 2SP2-With Head Screw.

#### Complete with Q and E Dies and Guides Japanned, Malleable Iron Stock with Steel Top.

Nos	OSP1	1SP1	2SP2
Threads Pipe, In	18.14.38.14	14.36.36.34.1	1 14 . 1 14 . 2
Dies with Ea. Stock.	4	5	3
Diam. of Dies, In	2 x 16	2 1/2 x 3/4	4 x 36
Wt. Per Set, Lbs	6	1246	24
Per Set	88.00	810.50	\$14.50
Stock Only Each.	3.00	3.50	8.50
Extra Guides, Each,	. 30	. 40	.75
		4 4 50	

For Extra Dies See Page 40.

#### ARMSTRONG ADJUSTABLE



#### Briggs American Standard

Complete Set includes Stock, Handles, Dies, Guides and Wrench,

The dies are standard, right hand thread, and will fit any adjustable stock of the same type.

			Stock	of the sa	me type.
Nos	1A	2A	2B	2 16 A	SA
Th'ds Pipe, In	1/8 to 1/2	34 to 1	1/8 to 1	1/2 to 1 1/4	1 % to 2
Size Dies Made.	1/8 to 1/2	1/4 to 1	1/s to 1	14 to 1 14	1/2 to 2
Wt. Set, Lbs	4 1/2	12 1/2	13 %	14 16	3.5
Per Sets					
Extra Dies	1.60	2.00	2.00	3.50	4.50
Extra Guides					
Nos	3B	3C	6.4	7.A	7B
Th'ds Pipe, In	1 to 2	% to 2	2 16 & 3	3 16 & 4	236 to 4
Size Dies Made.	% to 2	% to 2	2 1/2 & 3	236 10 4	2 % to 4
Wt. Set. Lbs					
Per Set	\$21.00	24.00	45.00	55.00	75.00
Extra Dies	4.50	4.50	17.00	20.00	20.00
Extra Guides					

# ARMSTRONG ADJUSTABLE BOLT DIES To Fit Standard Pipe Stocks

Furnished in U. S. or S. A. E. Standard Threads.

A GREENWAY CO. AND	C . D. D. D. D. J.	er was encountries or	F 25 5 C 5 C 5 C 5 C 5 C 5 C 5 C 5 C 5 C
Nos	B1A	B1B	B2A
Fits Stock Nos	1	1	2
Threads Bolts	14. 15. 36. 15	1/2 . 1/4 . 5/4 . 3/4	14. 16. 98. 16
Per Set	\$1.50	1.75	2.00
Nos	B2B	B2C	B2D
Fits Stock Nos	2	2	2
Threads Bolts		34, 78, 1	1 16 . 1 14
Per Set	\$2.00	2.00	2.25

# TOOL HOLDERS

ARMSTRONG STRAIGHT SHANK



#### With High Speed Steel Cutters

Complete with Drop Forged Wrench and One High Speed Steel Cutter, Ground to Shape.

Nos.	Size of Holder, Inches	Size Cutter, Sq. In.	Weight Each, Lbs.	Com- plete, Each	Extra Cutters, Each
00-S	√4 x 34 x 4 ½	-År	1/2	\$2.70	\$0.15
0-8	%x %x 5	1/4	3/4	2.85	.20
1-8	1/2 x1 1/4 x 6	70	1 1/2	3.25	.35
2-8	5% x1 3% x 7	-ing	2 1/4	4.00	. 55
3-8	34 x 1 56 x 8	76	3 1/2	5.40	.90
4-8	% x1 % x 9	1/2	4 %	6.90	1.30
5-S	1 x2 x11	5%	7 1/2	9.75	2.35
6-8	1 1/4 x 2 1/4 x 1 3	3/4	12	13.50	3.85
7-S	1 1/2 x 2 1/2 x 1 6	76	19	22.50	5.85
750-S	1 % x2 % x18	1	26	33.00	8.35
800-S	1% x3 x20	1 1/8	32	42.75	11.35

#### ARMSTRONG RIGHT HAND OFFSET



#### With High Speed Steel Cutters

Complete with Drop Forged Wrench and One High Speed Steel Cutter, Ground to Shape.

Nos.	Size of Holder, Inches	Size Cutter, Sq. In.	Weight Each, Lbs.	Com- plete, Each	Extra Cutters Each
00-R	∱x ¾x 4 ½	vin.	1/2	\$2.70	\$0.15
0-R	%x %x 5	1/4	%	2.85	.20
1-R	1/2 x1 1/8 x 6	16	1 1/2	3.25	.35
2-R	5% x1 3% x 7	3/8	2 1/4	4.00	. 55
3-R	% x1 % x 8	16	3 %	5.40	.90
4-R	% x1 % x 9	1/2	5	6.90	1.30
5-R	1 x2 x11	5/8	8	9.75	2.35
6-R	1 1/4 x2 1/4 x13	3/4	13	13.50	3.85
7-R	1 1/2 x 2 1/2 x 1 6	76	21	22.50	5.85
750-R	1 % x2 % x18	1	3.0	33.00	8.35
800-R	1 % x3 x20	1 1/8	35	42.75	11.35

#### ARMSTRONG LEFT HAND OFF-SET



#### With High Speed Steel Cutters, Left Hand Off-Set Shank

Complete with Drop Forged Wrench and One High Speed Steel Cutter, Ground to Shape.

Nos.	Size of Holder, Inches	Size Cutter, Sq. In.	Weight Each, Lbs.	Com- plete, Each	Extra Cutters, Each
00-L	∱ax %ax 4 1/2	78	1/2	\$2.70	\$0.15
0-L	%x %x 5	1/4	3/4	2.85	.20
1-L	1/6 x1 1/8 x 6	16	1 1/2	3.25	.35
2-L	%x1%x 7	3/8	2 14	4.00	.55
3-L	%x1%x 8	175	3 %	5.40	.90
4-L	7/8 x 1 3/4 x 9	1/2	5	6.90	1.30
5-L	1 x2 x11	5%	- 8	9.75	2.35
6-L	1 14 x 2 14 x 1 3	3/4	13	13.50	3.85
7-L	1 1/2 x 2 1/2 x 1 6	76	21	22.50	5.85
750-L	1 % x2 % x18	1	3.0	33.00	8.35
800-L	1 % x3 x20	1 1/8	35	42.75	11.35

#### All Above, One in a Box.

## CUTTING-OFF TOOLS

ARMSTRONG



#### Straight Shank

Complete with Drop Forged Wrench and High Speed Steel Cutter, Ground to Shape.

Nos.	Size of Holder, Inches	Size of Blades, Inches	Weight Each, Lbs.	Com- plete, Each	Extra Blades, Each
19 20 21 22 23	% x % x 4 1/2 % x % x 5 1/2 x 1 1/3 x 6 5/4 x 1 1/3 x 8	Ax % Ax % %x % %x %	14 84 1 14 2 14 3 14	\$2.85 3.00 3.60 4.50 6.00	\$0.60 .65 .90 1.30 2.15
24 25 26	% x1 % x 9 1 x2 x10 1 4 x2 4 x11	% x1 1/6 1/4 x1 1/4 1/4 x1 1/4	4 % 6 %	7.50 9.75 11.65	2.90 4.00 4.65



#### Right Hand Off-Set Shank

Complete with Drop Forged Wrench and High Speed Steel Cutter, Ground to Shape.

Nos.	Size of Holder Inches	Size of Blades, Inches	Weight Each, Lbs.	Com- plete, Each	Extra Blades, Each
29-R 30-R 31-R 32-R 33-R 34-R 35-R	72 x 34 95 x 75 95 x 1 15 95 x 1 35 34 x 1 55 74 x 1 34	4x 1/4 4x 1/4 1/4x 1/4 1/4x 1/4	56 56 135 244 345 434 634	\$2.85 3.00 3.60 4.50 6.00 7.50	\$0.60 .65 .90 1.30 2.15 2.90



Left Hand Off-Set Shank

Complete with Drop Forged Wrench and High Speed Steel Cutter, Ground to Shape.

Nos.	Size of Holder, Inches	Size of Blades, Inches	Weight Lbs. Each,	Com- plete, Each	Extra Blades Each
29-L 30-L 31-L 32-L 33-L 34-L 35-L 36-L	% x % % % % % % % % % % % % % % % % % %	5 x 16 5 x 16 16 x 16 16 x 16 16 x 1 16 16 x 1 16 16 x 1 16	5% 54 1 10 2 14 3 14 4 14 6 34	\$2.85 3.00 3.60 4.50 6.00 7.50 9.75 11.65	\$0.60 .65 .90 1.30 2.15 2.90 4.00 4.65

# BORING TOOLS

ARMSTRONG

Reversible

Complete with Holder and Bar with Straight and 45° End Caps, Two High



| Size | Diam. | Size | Weight | Com. | Exten

Nos.	Shank,	Bar,	Cutter,	Each,	plete,	Cutters,
	Inches	Inches	Sq. In.	Lbs.	Each	Each
8 9	% x % % x % ½ x1 %	1/2 1/4	10 17	1 1/2 1 5/4 3 3/4	\$1.90 4.90 5.80	\$0.10 .10 .18
10	% x1 %	114	The	6 1/2	7.65	.30
11	% x1 %		Sin	11	10.85	.50
12	% x1 %		The	17	16.00	.75
13	1 x2	11/2	1/2	25	22.50	1.00

# THREADING TOOLS

ARMSTRONG



With Positive and Accurate Adjustment

Complete with Drop Forged Steel Wrench and High Speed Steel Cutter.

Nos.	Size Holder, Inches	Weight Each, Lbs.	Complete with High Speed Cutter, Each	Ext. Cutters High Speed Steel, Each
00T	16 x 34 x 5	34	\$ 4.15	\$2.65
50	%x 7/8x 5	7/8	4.15	2.65
51	1/2 x 1 1/8 x 6	1 1/2	5.00	3.15
52	%x1%x 7	2 1/4	6.40	4.15
53	% x1% x 8	3 1/2	8.25	5.25
54	%x1%x 9	4 1/4	9.75	5.25
55	1 x2 x10	6 1/4	12.40	6.40

Note—When ordering, state if V, U, S, or Whitworth Standard is wanted. Single Point Sharp V Cutter will always be shipped unless otherwise ordered.

One in a Box.

# HAND THREAD CHASERS



No. 904A—Outside

U. S. Standard Threads

Thds. Per Inch. 4 1/2 Each \$0.50	.50	5 ½ . 50	6 . 50	. 50	.50	. 40
Thds. Per Inch. 10 Each \$0.40	.40	11½ .40	12 .40	13 .40	14 .40	16 .40
Threads Per Inch		19 .35	20 .35	$\frac{22}{.35}$	$^{24}_{.35}$	$^{26}_{.35}$
Threads Per Inch	27 \$0.35	28 . 35	30 .35	$\frac{32}{.35}$	36 .35	$\frac{40}{.35}$

Specify Number and Threads when ordering.

# LATHE CENTERS

MORSE



No. 295-Hardened Ends

Morse Taper Shank, Nos Length, Inches	2 1/8	1 3 ½ . <b>60</b>	$rac{2}{4rac{1}{16}}$
Morse Taper Shank, Nos Length, Inches	5 1/4	4 6 % 1 · 75	5 8 ½ 3 . 50

These Lathe Centers are made from Tool Steel, both ends being hardened. The shanks are ground to our standard tapers. Included angle of point is 60° and ground true. Other tapers made to order.

# LATHE MANDRELS



No. 570-Hardened and Ground

Tool steel, hardened and accurately ground. Tapered .0005 to 1 in., slightly under size on the entering end. They correspond in size to reamers and will fit holes reamed by them.

Other tapers per foot can be furnished at special prices. Size stamped on large end.

Diam Inch.	Lgth., Inch.	Each	Diam., Inch.	Lgth., Inch.	Each	Diam., Inch.	Lgth., Inch.	Each
14	3 3/4	\$0.80	1 %	8 1/2	\$3.25	2 1/2	12 1/2	\$10.50
20	4	.90	170	8 34	3.50	2.%	12 1/2	11.25
3/8	4 1/4	1.00	1 1/2	9	3.75	2.5%	12 1/2	12.00
10	4 1/2	1.10	1 %	9 1/4	4.00	2 11	13	12 75
1/2	5	1.20	1 5%	9 1/2	4.25	2 34	13	13.50
76	5 3/4	1.30	111	9 %	4.50	218	13	14.25
5/8	5 14	1.40	1 %	10	4.75	2 7/8	13	15.00
11	5 %	1.50	1 11	10 1/4	5.00	215	13	15.75
3/4	6	1.60	1 7/8	10 1/2	5.50	3	13	16.50
13	6 1/4	1.70	148	10 %	6.00	3 1/8	14	18.00
7/8	6 14	1.85	2	11	6.50	3 1/4	14	19.50
15	6.34	2.00	2 1	111/2	7.00	3 %	15	21.00
1	7	2.15	2 1/8	111/2	7.50	3 1/2	15	23.00
1 7	714	2.30	2 //2	12	8.00	3 5%	16	25.00
1 1/8	7.35	2.45	2 1/4	12	8.50	3 %	16	27.00
1 %	7.%	2.60	2 %	12	9.00	3 7/8	17	29.00
1 34	8	2.80	2 3/8	12	9.50	4	17	31.00
176	8 1/4	3.00	2 79	12 1/2	10.00			

# KNURLING TOOLS BILLINGS & SPENCER



For Lathe Use Forged Steel, with Movable Arms.

Per Pair Extra Knurls—¾ x<sup>A</sup><sub>15</sub> in., Coarse, Fine or Medium...**\$1.10** One in a Box.

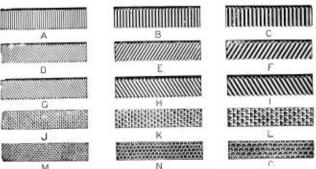
ADJUSTABLE KNURL HOLDERS



Polished Steel, Hardwood Handle

Per Dozen ..... \$12.00

# KNURLS



Tool Steel, Hardened Letters Designate Style of Knurls,

Per Dozen

No. 8-% in. Diameter, & in. Thick, .173 in. Hole. . \$9.50

#### LUFKIN HALF-INCH



#### STARRETT HALF-INCH



#### BROWN & SHARPE HALF-INCH





#### LUFKIN ONE-INCH





#### LUFKIN ONE-INCH



With Lock Nut, and Ratchet Stop

Decimal Equivalents Stamped on Frame.



#### With Lock Nut, without Ratchet Stop

Beveled Anvil and Spindle Face which makes it convenient in applying or sliding off the work. Decimal Equivalents Stamped on Frame.



Enameled Green Frames, Plain, without Lock Nut or Ratchet Stop

Frame is cut away to give clearance.



Enameled Green Frame, with Lock Nut, without Ratchet Stop

Frame is cut away to give clearance.



Enameled Green Frame, with Lock Nut and Ratchet Stop

Frame is cut away to give clearance.

### WOOD HANDLES FOR MICROMETERS

Any standard Lufkin Micrometer can be furnished with Wooden Handle attached to Frame at \$1.50 each additional. They are especially convenient thus equipped for use in Rolling Mills in gauging hot work.

#### STARRETT ONE-INCH



Leather Case—Extra

With Lock Nut and Ratchet Stop	
Decimal Equivalents Stamped on Frame, Ea	ch
No. 3-Measures 0 to 1 in. by Thousandths of an inch. Weight Each 8 Oz	00
No. 113—Measures by Ten Thousandths as Well as Thousandths of an inch	
Leather Case—Extra 1. One in a Box.	



#### With Lock Nut and Ratchet Stop

Frame is cut out for use in places where the ordinary frame cannot be inserted. The width of the anvil end of the frame is approximately  $\frac{1}{3}$  in. Decimal Equivalents No. 230-Measures 0 to 1 in. by Thousandths of an inch, Weight Each 8 Oz ......\$10.00 No. 231-Measures by Ten Thousandths as Well as 

. . . . . . . . . . . . . . . . 1 . 25



One in a Box.

With Finger Ring, Lock Nut and Ratchet Stop With Decimal Equivalents Stamped on Frame.

	acn
No. 220-Measures 0 to 1 in. by Thousandths of an	
inch, Weight Each S Oz\$11	.25
No. 221-Measures 0 to 1/2 in. by Thousandths of an	
inch, Weight Each 4 Oz 9	.75
Leather Case—Extra 1	.25
One in a Box.	

#### STARRETT QUICK ADJUSTING



#### With Lock Nut and Ratchet Stop

This Micrometer can be instantly opened or closed to any point within its capacity by pressing the finger against the end of the plunger. Fine adjustments are made in the usual way. Decimal equivalents stamped on frame. No. 204-Measures 0 to 1 in. by Thousandths of an 

Leather Case—Extra One in a Box. BROWN & SHARPE REX ONE-INCH



#### With Ratchet Stop

An Inexpensive Yet Accurate Tool, Decimal Equivalents Stamped on Thimble. No. 11RS-Measures 0 to 1 in. by Thousandths of No. 11-Without Ratchet Stop...... 6.25 Leather Case—Extra One in a Box.

#### BROWN & SHARPE ONE-INCH

With Ratchet Stop and Clamp Ring Decimal

Equivalents Stamped on the Frame.



No. 8RS-Measures 0 to 1 in. by Thousandths of an No. 8-Without Ratchet Stop..... Leather Case—Extra 1.25
Reads Ten Thousandths, with

Ratchet Stop and Clamp Ring Decimal Equivalents Stamped on the Frame.

Each No. 10RS-Measures 0 to 1 in. by Ten Thousandths as Well as Thousandths of an inch, Weight Each 8 Oz. \$11.75 No. 10—Without Ratchet Stop. 11.25 1.25 One in a Box.

With Clamp Screw and Ratchet 🥁 🖘 Stop

Decimal Equivalents Stamped on the Frame.



No. 17RS-Measures 0 to 1 in. by Thousandths of No. 17-Without Ratchet Stop..... 9.50 Leather Case—Extra ...... One in a Box.

# BROWN & SHARPE ROLLING MILL



For Gauging Hot Metals With Decimal Equivalents Stamped on Frame.

The wooden handle attached to these micrometers is about 2% in. long and 1 in. at largest diameter and makes the micrometer convenient to use as it keeps the hand at a distance from the hot metal. The clamp screw is provided with wing Each

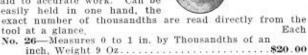
No. H17-Measures 0 to 1 in. by Thousandths of an inch, Wt. Otherwise Same as No. H17.. 11.50 One in a Box.

#### BROWN & SHARPE DIRECT READING

Indicator on Frame Gives Reading in Plain Figures

Is is a great time saver and aid to accurate work. Can be easily held in one hand, the

Leather Case—Extra



#### One in a Box. DAVENPORT-SLOCOMB DIRECT READING



#### Reads in Plain Figures

The reading is directon every thousandth and reads from 0 to 999. For measurements to an accuracy of .0005 inch it is only necessary to see that the right hand figure is about central in its aperture.

Drop Forged Steel Frame, Polished, with Raised Figures of Decimal Equivalents. No. DS1-Measures 0 to 1 in. by Thousandths of an

inch, Complete in Leather Case, Weight Each 

#### LUFKIN TWO INCH



For Measuring by Thousandths, 1 to 2 in.
With Decimal Equivalents Stamped on Frame.

With Decimal Equivalents Stamped on Frame.

Each

No. 1612—Plain, without Lock Nut or Ratchet Stop, with 1 in. Test Gauge.

No. 1622—With Lock Nut, without Ratchet Stop, with 1 in. Test Gauge.

No. 1642—With Lock Nut and Ratchet Stop, with 1 in. Test Gauge.

For Measuring by Ten Thousandths, 1 to 2 in.

Each

No. 1642V—With Lock Nut and Ratchet Stop, with 1 in. Test Gauge.

No. 1642V—With Lock Nut and Ratchet Stop, with 1 in. Test Gauge.

No. 1642V—With Lock Nut and Ratchet Stop, with 1 in. Test Gauge.

Weight Each 10 Ounces.



### Green Enameled Frame

For Measuring by Thousandths, 1 to 2 in. Each
No. 1812—Plain, without Lock Nut or Ratchet Stop.... 7.00
No. 1822—With Lock Nut, without Ratchet Stop.... 7.50
For Measuring by Ten Thousandths, 1 to 2 in.
No. 1822V—With Lock Nut, without Ratchet Stop... 9.00
Weight Each 10 Ounces.



#### Green Enameled Frame

For Measuring by Thousandths, 1 to 2 in. Each No. 1842—With Lock Nut and Ratchet Stop. . . . . . \$8.00 For Measuring by Ten Thousandths, 1 to 2 in. No. 1842V—With Lock Nut and Ratchet Stop. . . . 9.50 All Above, One in a Hinged Wooden Box, with Clasp.

#### STARRETT TWO-INCH



With Lock Nut, Ratchet Stop and 1 in, Test Gauge

#### STARRETT TWO-INCH WITH ATTACHMENT

# ATTACHMENT FOR STARRETT TWO-INCH MICROMETER CALIPERS



Each

By means of this attachment a 2 in. micrometer caliper may be instantly converted into a 1 in. tool. One in a Box. BROWN & SHARPE TWO-INCH



#### With Clamp Ring

The range is obtained by an adjustable anvil which gives measurements from 0 to 1 in, when in position shown and from 1 to 2 in, when the anvil is drawn out. A standard is furnished for adjusting the micrometer. Decimal equivalents stamped on frame.

No.	45-1	Measur	es 0	to	2	in.	b	y	Т	h	ou	sa	n	dt	h	s	0	ť	2	n
	Inch.	Weigl	it Ea	ch	10	Oz														\$13.50
No.	45R-	-With	Rate	het	S	top														14.00
Lea	ther C	ase—I	Extra																	1.60
				0	ne	in	a	B	03	τ.										



#### With Clamp Ring

A standard is furnished for adjusting the micrometer.

Decimal equivalents are stamped on frame.

Each

No. 47—Measures 1 to 2 in by Thousandths of an

No.	47-Meast	ires 1	to	2 in	by	7	Pho	us	an	dt	hs	of	2	n		-
	Inch, Weig	ght Ea	ach	10 0	)z										\$10	.50
No.	47R-With	h Rat	chet	Sto	р										11	.00
	her Case—															. 60
			- 0	ina i	n 9	B	w									



#### Reads Ten Thousandths, with Clamp Ring

A standard is furnished for adjusting the micrometer. Decimal equivalents are stamped on the frame.

No.	48—Measures 1 to 2 in. by Ten Thousandths as
	Well as Thousandths, Weight Each 10 Oz \$12.25
No.	48R-With Ratchet Stop
Lea	ther Case—Extra 1.60
	One in a Box.

#### BROWN & SHARPE THREE-INCH

	DATE OF THE PARTY	
	For Measuring by Thousandths, 2 to 3 in.	
No.	. 50 Plain, Weight Each 14 Oz	\$11.50
No.	50RS-With Ratchet Stop	12.00
Star	ndards—Extra	1.25
Lea	ther Case—Extra	3.00

# LUFKIN THREE-INCH



#### Green Enameled Frame

A service and the service and	Each
No. 1813-Plain, without Lock Nut or Ratchet Stop,	
for Measuring by Thousandths, 2 to 3 in	8 7.75
No. 1823 - With Lock Nut, without Ratchet Stop for	
Measuring by Thousandths, 2 to 2 in	8.25
No. 1823V-With Lock Nut, without Ratchet Stop	
for Measuring by Ten Thousandths 2 to 2 in	9.75
No. 1843-With Lock Nut and Ratchet Stop for	
Measuring by Thousandths 2 to 3 in	8.75
No. 1843V - With Lock Nut and Ratchet Stop for	
Measuring by Ten Thousandths 2 to 2 in	10.25
2 in. Test Gauges—Extra	1.25
Weight Park 10 C	1.20
Weight Each 12 Ounces.	

One in a Hinged Wooden Box, with Clasp.

Each

#### LUFKIN THREE INCH



For Measuring by Thousandths, 2 to 3 in.

Decimal Equivalents Stamped on Frame.

No.	1613-Without Lock Nut or Ratchet Stop, with
	2 in. Test Gauge
No.	1623-With Lock Nut, without Ratchet Stop,
	with 2 in. Test Gauge 13.75
No.	1643-With Lock Nut and Ratchet Stop, with
	2 in. Test Gauge 14.25
	For Measuring by Ten Thousandths, 2 to 3 in.

#### One in a Hinged Wooden Box, with Clasp. BROWN & SHARPE IN SETS

#### With Clamp Rings, in Leather Case

Stops, Otherwise Same as No. 131 . . . . . . . . . . . 39 .25

#### SLOCOMB ENAMELED FRAME



#### With Decimal Equivalents Stamped on Thimble

The "I" section frame gives great rigidity with little weight. The screw is all steel, working in a nut that gives about four times the bearing

surface of regular micrometers. Measures thousandths of an inch.

#### STARRETT BLACK ENAMELED FRAME



No. 436—With Decimal Equivalents Stamped on Spindle

These Calipers meet the demand for accurate gauges at a low price. Graduated to read thousandths of an inch.

Size, Inches 0 to 1 With Ratchet \$6.75	1 to 2	2 to 3	3 to 4 9.00	4 to 5	5 to 6 10.50
Without Ratchet 6.25	7.00	7.75	8.50	9.25	10.00
Case—Extra 1.25 Standards—Ex					2.00

In Sets, without Standards, without Ratchet	Stop
Set Nos	436B
No. of Micrometers 3	6
Range, Inches 0 to 3	0 to 6
Per Set \$21.00	48.50
Leather Case—Extra 4 . 00	7.50
Standards—Evtra 2.25	7.50

Standards—Extra	
In Sets, without Standards, with Ratchet	Stop 436D
Set Nos	
No. of Micrometers 3	6
Range, Inches	0 to 6
Per Set \$22.50	51.75

#### STARRETT DROP FORGED FRAME

No. 226-With Lock Nut

Frame Drop Forged from Bar Steel and Japanned except 1 in., which is Polished, Knurled Lock Nut, Sleeve and Ratchet Stop for Measurements by Thousandths of an inch. The 1 in, has the Decimal Equivalents Stamped on the Frame, the Other Sizes are Marked to Show their Capacity.

#### With Ratchet Stop

Size, Inches	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6
Each	\$9.00	10.50	11.25	12.50	13.50
Standard-Extra	1.00	1.25	1.50	1.75	2.00
Leather Case—Ex.	2.50	3.00	3.50	4.00	4.75

#### Without Ratchet Stop

Size,	Inches	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6
Each		\$8.50	10.00	10.75	12.00	13.00

#### With Ratchet Stop, In Sets

Set Nos	226H
No. of Micrometers 3	6
Range, Inches 0 to 3	0 to 6
Per Set	66.75
Standards—Extra 2.25	7.50
Leather Case—Extra 4.00	7.50

Note—The regular No. 201 Starrett Micrometer is furnished in the 1 in. size.

#### Without Ratchet Stop, In Sets

Set Nos		226C 226G	
No. of Mic	rometers	3 6	
Range, Inc.	hes	0 to 3 0 to 6	ŝ
Per Set		828.00 63.75	5

Note-The regular No. 3 Starrett Micrometer is furnished in the 1 in. size.

#### BROWN & SHARPE REX



#### With Clamp Ring

Measure by thousandths of an inch. Nos. 77 to 88 have holes in the frame which make them light and convenient to handle. They also have the heavy type thimble, spindle and measuring screw.

and measuring beten.			
Nos 61	63	65	67
Capacity, Inches 1 to 2	2 to 3	3 to 4	4 to 5
Weight Each, Lbs 1/2	34	1	1 1/2
Each \$7.50	8.25	9.00	9.75
Standards-Extra 1.00	1.25	1.50	1.75
Cases—Extra 2.50	3.00	3.50	4.00
Nos 69	71	72	73
Capacity, Inches 5 to 6	6 to 7	7 to 8	8 to 9
Weight Each, Lbs 1%	3	3 3/4	4 34
Each \$10.50	11.50	12.50	13.50
Standards-Extra 2.00	2.25	2.50	2.75
Cases—Extra 4.75	0.555	35.5.5.5	
Nos	74	75	76
Capacity, Inches		10 to 11	11 to 12
Weight Each, Lbs		7.34	7 1/2
Each	All the second second	15.50	16.50
Standards-Extra		3.25	3.50

Note—Any of these micrometers can be furnished with Ratchet Stop when so ordered at 50 cents each additional.

Nos. 61, 63 and 65 can be furnished to read to ten thousandths of an inch at an additional cost of \$1.50 each. No. 71 and larger sizes are furnished in finished wooden

No. 71 and larger sizes are turnished in hinshed wooden cases with hinged covers. Be sure to state when ordering if standards are wanted.

#### LUFKIN FOUR, FIVE AND SIX INCH



#### Green Enameled Frame

These micrometers are popular in work not requiring the finest finished tool, and they are correspondingly lower in price. They are made of high grade specially selected materials throughout, and are of identically the same construction as the full finished micrometers and are thoroughly reliable in every way. They are furnished with cut-away frames.

### For Measuring by Thousandths, 3 to 4 in.

	Each
No. 1814-Without Lock Nut or Ratchet Stop 8	8.50
No. 1824-With Lock Nut, without Ratchet Stop	9.00
No. 1834-Without Lock Nut, with Ratchet Stop	9.00
No. 1844-With Lock Nut and Ratchet Stop	9.50
3 in, Test Gauge—Extra	1.50
For Measuring by Thousandths, 4 to 5 in.	
No. 1815-Without Lock Nut or Ratchet Stop	9.25
No. 1825-With Lock Nut, without Ratchet Stop	9.75
No. 1835-Without Lock Nut, with Ratchet Stop	9.75
No. 1845-With Lock Nut and Ratchet Stop	10.25
4 in. Test Gauge—Extra	1.75
For Measuring by Thousandths, 5 to 6 in.	
No. 1816-Without Lock Nut or Ratchet Stop	10.00
No. 1826-With Lock Nut, without Ratchet Stop	10.50
No. 1836-Without Lock Nut, with Ratchet Stop	10.50
No. 1846-With Lock Nut and Ratchet Stop	11.00
5 in. Test Gauge—Extra	2.00
One in a Hinged Wooden Box with Clasp,	

#### LUFKIN ONE TO FOUR INCH

#### Green Enameled Frame, with Interchangeable Anvils

The outstanding features of these micrometers are accuracy, simplicity of construction, ease of adjustment and fine design.



#### For Measuring Thousandths, 1 to 4 in.

No. 824A—With Lock Nut, without Ratchet Stop. \$20.75
No. 844A—With Lock Nut and Ratchet Stop. . . . . 21.25
One in a Hinged Wooden Box with Clasp.

#### LUFKIN TWO TO SIX INCH For Measuring Thousandths, 2 to 6 in.

#### BROWN & SHARPE TWO TO SIX INCH



#### With Clamp Ring

The range of measurements is obtained by changeable anvils which are easily and quickly changed and are held in place by a knurled nut. Each anvil has separate means of adjustment for wear. Price includes a finished wood case.

Each

No.	55 Measure	s 2 to 6	in. by	Thousan	idths (	of an	CONTRACTOR
	inch						\$20.00
No.	55RS-With	Ratchet	Stop				20.50
Star	ndards—Extra			I	er Set	of 4	6.50

#### STARRETT TWO TO SIX INCH

#### With Lock Nut



Designed for automobile repair men to meet the demand for cylinder regrinding and reboring shops. It will measure all ordinary pistons.

This micrometer is well balanced and the shape of the

forged frame with the holes, makes it easy to handle. Each anvil has two adjusting nuts to take care of the wear and act as a seat when held in position by the knurled nut. Suitable wrenches are furnished to make any adjustment. Decimal equivalents are stamped on the thimble.

No.	224A-Measures 2 to 6 in. by Thousandths of an	Each
	inch	\$20.00
	224A-R-With Ratchet Stop	
Star	ndards—(Set of 4) Extra	6.50
Lea	ther Case—Extra	4.00

Note—Sent with Standards and without Case unless otherwise ordered.

#### BROWN & SHARPE SCREW THREAD

#### For Measuring Screw Threads

The distinctive feature in the construction of this Caliper is that the end of the movable spindle is pointed, and the fixed end or "anvil" is V-shaped. Enough is taken from the end of the point and the bottom of the V is carried down low enough, so that they will not rest on the bottom or top of



the thread to be measured, but on the cut surface. As the thread itself is measured, it will be seen that the actual outside diameter of the piece does not enter into consideration. And as one-half of the depth of the thread from the top on each side is measured, the diameter of the thread as indicated by the Caliper, or the pitch diameter, is the full size of the thread less the depth of one thread.

#### Furnished U. S. Standard or V Thread

Nos	150	152	153
Thread Range Per Inch.	48 to 64	8 to 13	14 to 20
Each	\$11.50	12.00	12.00
Leather Case—Extra	1.20	1.25	1.25
Nos	154	155	156
Capacity, Inches	1	1	2
Thread Range Per Inch.	22 to 30	32 to 40	4 1/2 to 7
Each	\$12.00	12.00	14.50
Leather Case—Extra	1.25	1.25	1.60
Nos	157	158	159
Capacity, Inches	2	2	2
Thread Range Per Inch.	8 to 13	14 to 20	22 to 30
Each	\$14.50	14.50	14.50
Leather Case—Extra	1.60	1.60	1.60

#### LUFKIN SCREW THREAD



#### Furnished with Either Fixed or Movable Aprils

r titinistical tital 1		red or M	ovable Al	IVIIS
Nos		611T	611T	611T
Capacity, Inches		1	1	1
Thread Range	8 to 13	14 to 20	22 to 30	32 to 40
Weight Each, Oz	8	8	8	8
Each		12.00	12.00	12.00
Nos		612T	612T	612T
Capacity, Inches	2	2	2	2
Thread Range	4 1/2 to 7	8 to 13	14 to 20	22 to 30
Weight Each, Oz	10	10	10	10
Each			14.50	14.50
One in a Hing	zed Wood	len Boy w	with Class	

# TUBE MICROMETER CALIPERS

LUFKIN



#### For Measuring the Thickness of Tubing

End of anvil is rounded so it touches at one point on the inside of tube and the end of spindle is flat, so it touches at only one point on the outside, thus giving exact thickness. The frame is cut away to give clearance. Decimal equivalents are stamped on back of frame. With Ratchet Stop.

No. 2630—Measures 0 to ½ in. by Thousandths of an Inch, Weight Each 3 Oz......\$8.00 One in Hinged Wooden Box, with Clasp.

#### BROWN & SHARPE



#### For Measuring the Thickness of Tubing

The anvil is rounded on the end and the back of the frame at the anvil is cut away to fit into tubing in in. diameter or larger. Decimal equivalents of English Standard Gauge are stamped on back of frame,

No. 225-Measures 0 to 1/2 in. Thousandths of an 
 Inch, Weight Each 3 Oz.
 \$8.00

 No. 225RS—With Ratchet Stop.
 8.50
 One in a Box.

# PAPER GAUGE MICROMETER CALIPERS

BROWN & SHARPE



#### For Gauging Paper, Rubber and Other Soft Materials

Large Measuring Surfaces do not compress the material as much as the regular anvil and spindle thus allowing measurements to be taken more quickly and accurately. Decimal equivalents stamped on frame.

No. 230-Measures 0 to 3/8 in. by Thousandths of an Inch, Weight Each 3 Oz..... \$ 9.50 No. 230RS-With Ratchet Stop ...... 10.00 Leather Case—Extra .....

#### MICROMETER HEADS LUFKIN



## With Ratchet Stop

These heads are easily attached to tools, machines, special gauges, etc., and are so used where measurements with micrometer accuracy are required.

	Each
No. 030-Measures	0 to 1/2 in. by Thousandths of an
Inch, Weight B	Each 1½ Oz\$4.50
No. 030V-Measur	es 0 to ½ in. by Ten Thousandths
of an Inch. We	ight Each 1½ Oz 6.25
No. 031-Measures	0 to 1 in, by Thousandths of an
Inch, Weight F	Each 4 Oz 5.50
	es 0 to 1 in. by Ten Thousandths
of an Inch, We	eight Each 4 Oz 7.25
	One in a Box.

#### INSIDE MICROMETER CALIPERS LUFKIN

#### Micrometer Head and Tubular Extension Rods

For measuring by thou-sandths of an inch. Head measures from 11/2 in. Rods can be added to either end of the Micrometer Head.



Sets 680A and 680B have 1/2 in, movement of screw

pers solt to solk make I				
Nos 680A	68013	681C	681D	681K
Range, Inches 1 1/2 to 8	1 1/2 to 12	4 to 24	4 to 32	4 to 40
No. of Rods 5	8	7	8	10
Wt. Each, Oz 8 1/2	12	27	39	4.8
Each \$12.00			20.00	24.00
One in a Hinged V	Vooden B	ox, with	Clasp.	

#### STARRETT



For Internal and Linear Measurements

It is also useful in measuring parallel surfaces. The micrometer screw in the head has ½ in, movement in Sets A and B, 1 in. in Set C, and, by means of the extension rods furnished, the sizes as given below for each set can be obtained. The extension rods are provided with a collar, against which rods are conveniently and accurately set in the micrometer head. In setting these rods see that the zero mark on the collar coincides with the zero mark on the micrometer head. With the rods are sent standard gauges or rings to slip on the rods under the collars, to further extend the rod. The contact surfaces are all hardened, and provision is made for adjustment, to compensate for wear of the screw and contact surfaces.

No.	124A—Measures 2 to 8 in. by Thousandths of an
	Inch, Has Six Rods and One 1/2 in. Gauge \$ 7.25
No.	124B-Measures 2 to 10 in, by Thousandths of
	an Inch. Has Ten Rods and One 1/2 in. Gauge 8.50
No.	124C-Measures 8 to 32 in. by Thousandths of
	an Inch. Has Four Rods, One 1 in. and One 2
	in. Gauge 10.25
No.	124D—Measures 2 to 32 in., Comprising Sets A
	and C
Aux	iliary Handle—Extra 1.00

Leather Cases 124C 4.00 5.00 Note-Always sent with Leather Case unless otherwise ordered.

# AUXILIARY HANDLE



#### Used in Connection with No. 124 Inside Micrometers

By removing the nut opposite the lock screw and screwing the handle in place of same to take measures in holes where the micrometer could not be used otherwise. Each 

#### HEIGHT GAUGE ATTACHMENT

#### Used in Connection with No. 124 Inside Micrometers

For use as a height gauge. The anvil end is even with the bottom of the base and the micrometer is held perpendicularly, making a reliable gauge. A slight turn of the knurled screw instantly clamps it to or releases it from the base.

No. 447—Attachment Only......\$2.50



# INSIDE MICROMETER CALIPERS BROWN & SHARPE



#### Particularly Adapted for Motor Service

For measuring cylinder bores, rings, and any other inside measuring jobs. It consists of a holder with a half inch micrometer screw and extension rods. The holder of this tool has a clamping device which clamps the thimble and prevents the screw from turning when in use.

The collar which is provided with this micrometer slips over the end of the rod and can be set accurately against the micrometer head. In order to obtain the full one inch range with each rod, the spacing collar must be added.

Note—Always sent with leather case unless otherwise ordered.

#### BROWN & SHARPE IMPROVED



With Clamp Screw

For measuring small internal dimensions over a shoulder. Measuring surfaces are hardened and ground to a radius to insure accurate measurements and prevent cramping when measuring parallel surfaces.



With Clamp Screw

The shape of the jaws of this tool enables the user to take inside measurements over a flange or shoulder.

No. 252-Measures 1	5 to	1	1/2	in		by	T	ho	us	an	đt	hs	01	
an Inch														\$15.00
Leather Case—Extra														1.25
No. 254-Measures 1	to	2	in.	by	1	Γh	ou	sa	nd	th	8	of	an	L
Inch														15.00
Leather Case—Extra														1.60
	On	e	in	a	B	ox								

# MICROMETER CALIPER GAUGES



#### Made of Steel Throughout, Nicely Finished

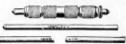
Each

No.	126-2 ½ in	., with 5	Rods,	Capacity	from	2 1/2	to
	10 in						\$3.00
No.	126C-With	Leather	Case.				4.25

These Micrometer Caliper Gauges are designed for close internal measurements, indicating thousandths when a definite distance in inches is not essential. The body of the tool is a steel tube, provided at one end with a binding chuck in which are fastened the plain rods, and it can be quickly adjusted to any approximate size. Anvil in end of sheave is hardened.

One Set in a Box.

# ADJUSTABLE CALIPER GAUGES



Provided with Binding Posts at Each End For internal measurements of large cylinders and of distances between uprights.

Per Set

# TELESCOPING INSIDE GAUGES



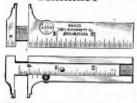
#### With Hardened Heads

These are instruments from which the exact size of holes or slots can be taken by an outside caliper or micrometer, so that shrink, close or loose fits, varying in thousandths or less can be made and measured.

Nos	229A	229B	229C
Range, Inches		% to 1 1/4	1 1/4 to 2 1/2
Each	\$1.80	2.10	2.40
Nos		229D	229E
Range, Inches			3 1/2 to 6
Each		\$3.00	3.60

In operating these gauges the telescoping head is compressed and the plunger is locked by a slight turn of the knurled screw at end of handle. When locked the head retains the measurement taken until released. One in a Box.

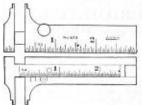
# POCKET SLIDE CALIPERS



No. 425—For Outside or Inside Measurements
With Improved Clamping Device, Graduated in 32nds
nd 64ths.

and orths.	
Length, Inches 3	5
Depth of Jaws, Inches	170
Nibs when Closed, Inches ,125	. 250
Each \$4.00	5.00
One in a Box.	

#### LUFKIN



For Outside or Inside Measurement

With Improved Clamping Device, Graduated in 32nds and 64ths. The Slide has a Stop which prevents it from being withdrawn.

Nos	455
Length, Inches	5
Depth of Jaws, Inches	176
Nibs when Closed, Inches 14	1/4
Each \$4.00	5.00
One in a Roy	

# CIRCUMFERENCE GAUGES



For Outside and Inside Circumference
No. 455P—5 in., Capacity 3% in. Diameter, 11% in.
Circumference, Depth of Jaws 1½ in. Will Caliper Cylinder Up to 2% in. Diameter. Graduated
on Slide Circumference inches to 16ths Upper
Edge, Standard inches to 32nds Lower Edge,
Stock Graduated 5 in, to 32nds in., Weight Each
3 Oz.

3 Oz. \$4.75
This Gauge can also be used as a regular Pocket Slide
Caliper. Measurements are read to a line rather than to
face of jaw and reading lines are clearly marked "Out or
In." Nibs when closed are 14 in. wide.

One in a Box.

# CALIPER SQUARES BROWN & SHARPE



For Inside or Outside Measurements

Convenient for a large class of work where extreme accuracy is not required, also valuable for use in duplicating work when the number of pieces will not warrant the expense of fixed gauges.

The adjusting screw enables the sliding head to be more accurately set to the graduations than would be possible without its use. Graduations on one side to 64ths, other

With Adjusting Screw

side to 100ths of an inch.

TO ACIE LEGISLE			
Nos	560A	560B	560C
Size, Inches	4	6	9
Length of Jaws, Inches	1 1/4	2	3 1/4
Width of Jaws Closed, In	1/4	1/4	36
Each	\$10.20	13.20	17.40
Case Extra	1.75	2.00	3.00
Without Adj	usting Scr	ew	
Nos	560D	560E	560F
Size, Inches	4	6	9
Each	\$9.00	10.80	15.00
One	in a Box		10.000.00.00.00

#### STARRETT For Inside or Outside Measurements



The sliding head can be accurately set to the graduations by means of the adjusting screws. The beam is graduated 64ths and 100ths.

With Adjust	ing Screw		
Nos	25A	25B	25C
Size, Inches	3	4	6
Depth of Jaws, Inches	1 1/4	1 36	1 1/2
Width of Nibs Closed, Inches.	1/4	1/4	1/4
Each	\$8.00	10.20	12.00
Case Extra		1.75	2.00
	in a Box.		

# VERNIER CALIPERS BROWN & SHARPE

For Inside or Outside Measurements

Graduated on both Front and Back, by means of a Vernier, to thousandths of an inch. The jaws are hardened and ground. Points are placed on the bars and slides so that dividers can be set to transfer distances.

Nos	570A	570B	570C	570D
Size, Inches	6	12	24	36
Length of Jaws, Inches	1 1/4	2 1/4	2 1/4	2 34
Width of Jaws, Closed	1/4	3/10	3/10	1/2
Each	\$24.00	30.00	42.00	72.00
Case Extra	2.75	4.00	5.00	15.00
	One in a	Box.		

# SURFACE GAUGES BROWN & SHARPE



#### With Grooved Base

With these Surface Gauges a wide range of adjustments can be quickly obtained by means of a knurled adjusting screw. The maximum adjustment can be quickly obtained, and at the same time the adjustment is so arranged that all moving parts can be firmly clamped in position when the desired setting has been obtained.

A V-shaped groove in the bottom of the base adapts these gauges for

cylindrical work.

The Base of these Gauges are furnished with two gauge pins in the rear end that can be pushed down and used against the edge of a plate or side of a T slot.

One in a Box.

#### STARRETT UNIVERSAL

With Grooved Base

In the rear end of the base are two gauge pins, frictionally held, which may be pushed down to bear against the edge of a surface plate or in the slot of a planer bed for linear work.





With Case Hardened Grooved Steel Base Each

No. 257C—3 ½ in. Base, with 12 in. Sp'dle 5.40 No. 257D—3 ½ in. Base, with 12 and 18 in. Spindles . . . . . . . . . . . . . . . . . 6.00

In the base are four gauge pins, frictionally held, which may be pushed to bear against the edge of a surface plate, or in the slot of a planer bed for linear work.

One in a Box.

#### STARRETT TOOLMAKERS

#### With Case Hardened Grooved Steel Base

Milled sizes for finger grip. Top side slotted and rocking bracket pivoted in same. There is a small hole in the clamp next to the base in which the scriber may be used for light work, the spindle being removed. An auxiliary guide is furnished to clamp to the base.

Each

No. 56A—With 4 in. Spindle and Auxiliary Guide...\$4.10 No. 56B—Same as No. 56A, but without Auxiliary

Guide . . . . . . . . . . . . 3.50

Auxiliary Guide

One in a Box.

### DIAL TEST INDICATORS

#### STARRETT UNIVERSAL

#### Simple, Reliable, Easily Read and Very Sensitive

Slightest pressure upon contact point produces a movement of the hand on the dial. Circumference of dial divided into 100 equal spaces, each representing a movement of the contact point of one-thousandth of an inch. One revolution of the hand therefore indicates onetenth inch, the capacity of the instrument being two-tenths. By bringing the contact point



against the work with just enough pressure to give the hand one full turn, then setting it at 0, an opportunity is given for one full revolution of the hand to both right and left of 0, showing a rise or drop in the work and the amount of variation. A most valuable feature is the adjustable dial. Each

No.	196A—Indicator	with	Al	1 /	Atta	chm	ents.	3.8	
	Shown							\$	\$13.50
No.	196B-Indicator	Only,	with	3 C	onta	et I	Point	8	9.00
No.	196F-Hole Atta	chmer	ıt						1.80
No.	196G-Clamp			ecent.	***	er voice o			.90
No.	196H-Tool Post								.90
No.	196K-Sleeve								.90
	ra Contact Points								. 15
	O								

#### BROWN & SHARPE

#### In a Finished Wood Case

This Indicator is especially serviceable to erectors or inspectors of machines, for determining the inaccuracy in a surface or the movements of a spindle or arbor, etc., also to tool makers for obtaining comparative measurements on very close work.

No. 730-Spindle Movement 310 in. by Thousandths, Diameter of Dial 1 % in., Length of Base 8 1/2 in., 

The pointer is very sensitive and the graduations are widely placed so that half or quarter thousandths can be estimated. The dial has a white enamel face and may be turned to bring the zero under the index pointer. points of the indicator spindle can be removed and different lengths and forms of points used.

The horizontal arm is adjustable to any angle, it can be removed also and used independently as in the tool post of a lathe. The blocks which fit into the T slot in the base permit its being used against the edge of a surface plate or T slot, for checking the accuracy of long horizontal surfaces.

In Finished Wood Case.

# LATHE TEST INDICATORS

BROWN & SHARPE



#### With Hardened Steel Shank

This Indicator is for centering work in a lathe, testing lathe centers, shafting, and work of a similar nature. The shank is made of hardened steel. It can be held in the tool post of a lathe and adjusted either upwards or downwards and readings obtained. The indicator point is of hardened steel, spherical in shape, allowing pressure to be brought upon it from any angle in taking readings. Each

No. 738-Range 0 to .007 in. Either Side of Zero One in a Box.

#### TEST INDICATORS STARRETT UNIVERSAL

#### Graduated to Read .015 Inches Either Side of Zero

This Indicator may be used to test inside, outside or surface It can be instantly attached to the spindle or the needle of any surface gauge, and used to show the slightest variation in thousandths. It may be clamped to a flat or round sup-



port, up to 3/4 in, flat or round. A special holder as shown above, is designed to go in the tool post of a lathe, adapting it for use to show the accuracy of all sorts of lathe work, chucking, or locating and centering work on face plate.

The head of the needle has three working points, equally distant from its fulcrum, so the telltale needle will vibrate, reading in thousandths, when work is in contact with either point-in front, above or below it. When in front, the spring operating the telltale needle needs to be reversed to throw point of needle up instead of down as when used above or below the work. This may be instantly done by a slight turn of the disc to which the vibrating spring is attached. The working parts of the head are hardened.

No.	64A—Indicator, Complete with Tool Post Holder
	and Arm\$4.25
No.	64B-Indicator Only 3.00
No.	64C-Tool Post Holder without Arm, %x%x6 in90
No.	64D-Tool Post Holder, with Arm 1.25
	One in a Box.

#### STARRETT CENTER TESTER

Improved Design Designed to use in adjusting

and locating centrally any point or hole in a piece of work operated upon in a lathe chuck or on a face plate, also to test the truth of lathe centers or a shaft between the centers, the

instrument being held in the tool post. This instrument is poined to a tool-post shank by a flexible steel ribbon with sufficient spring to properly hold the needle in contact with the work.

It is a tool in every up-to-date tool room. No. 65—Indicating Needle 12¾ in. Long when Joined, with Steel Ball, .175 in. Diameter to Slip Over Point for Inside Work......\$3.75

# KOCH UNIVERSAL



With Safety Feature

Two points of contact, a Plunger and Bell Crank, which gives it a broad universal range. Each graduation represents .001 movement of the plunger or .002 movement of the bell crank.

Adapted for testing Arbors, Mandrels, Lathe Centers, The plunger operates away from the lever instead of against it, this Safety Feature prevents delicate parts being broken by jolt of the plunger. Each No. K-1-Indicator 85.50

One in a Box.

# MILLING MACHINE WIGGLERS



With Reversible Point

For Jig and Tool Work, locating center of work on Milling Machines, Drill Presses, etc.

No. 18-4% in. Long Open, 2% in. Closed, Point 1% One in a Box.

# SPEED INDICATORS BROWN & SHARPE



#### Insulated Fibre Handle

Nickel plated case dull finish, all working parts enclosed, registers up to 5,000 revolutions, faster speeds can be readily determined. All readings are taken from one side of indicator, the two arrows on face of dial eliminates any confusion. The figures showing through the small round windows on the dial read every five revolutions. The inside dial reading every 100 revolutions is quickly returned to zero for repeated use by a knurled knob on the back of the indicator.

#### STARRETT

Each Speed Indicator is provided with Three Styles of Tips, a Pointed Steel Tip which forms the end of the Spindle, and Two Rubber Tips which may be slipped over the Pointed Metal Tip, so that no matter what shape of the shafting nor how it is centered it will be possible to determine the speed accurately.

#### Knurled Handle

Leather Case, Extra..... 1.35

This Indicator may be run at highest speed required without heating, and this on account of a frictionless bearing against which the inner end of the Spindle revolves.



Improved Eac

Leather Case, Extra..... 1.35
A nicely made and finely working indicator. The grad-

A nicely made and finely working indicator. The graduations show every revolution, and with two rows of figures read both right and left as the shaft may run.

Registering F No. 107—Nickel Plated, Rubber Handle, with Rubber Tips for Pointed and Hollow Centers, Weight Each

Automatically registers hundreds as well as units and tens, and thus releases the mind from keeping tally. Will register 5000 revolutions.

One in a Box.

## SURFACE SPEED ATTACHMENTS FOR STARREST SPEED INDICATORS

#### Rubber Banded Wheel



Designed to show the number of lineal feet per minute the periphery of a shaft or pulley is running and thus enable a workman to know if the speed is too fast or is too slow to get the most work the tool will stand.

May be slipped off or on the spindle of the indicator, and when held against the periphery of a shaft or pulley a half minute or a minute, by dividing the figures

One in a Box.

### COUNTERS

#### VEEDER CLUTCH SPEED

#### Registers Revolutions Per Minute



For Engines, Motors, Line Shafting, Machine Spindles, etc. A stop watch is not needed because of the clutch in the counter. The plain figure index is easy to read and avoids errors. It is never necessary to set the instrument. Speeds as high as

instrument. Speeds as high as 5000 R. P. M. can be safely measured. Two rubber tips, one pointed and the other flat, are furnished with each instrument.

No. 21—Nickel Plated, with Two Rubber Tips.....\$3.50 One in a Box.

#### VEEDER DIRECT SPEED

#### Registers Revolutions Per Minute

Direct Driven, with Pointed Rubber Tip. The End Thrust is taken up by a ball bearing which reduces friction.



Each

No. 22—Nickel Plated, with One Rubber Tip......\$2.50 One in a Box.

#### VEEDER SMALL REVOLUTION

#### For Light Fast Running Machines



Though small, this counter is very durable; its mechanism will stand a very high rate of speed, making it especially suitable for light, fast-running machines. Will subtract if run backward.

No. 4—Nickel Plated......\$2.00

One in a Box.

#### VEEDER RATCHET

#### With Outside Stops

This Counter is supplied with outside stops which regulate the throw of the lever.

The lever is adjustable, allowing the counter to be used at any angle.

the counter to be used at any angle.

It is supplied with a return action spring which automatically returns the lever into position for the next

Each

No. 14—Nickel Plated......\$2.50 One in a Box.

# D0000

#### VEEDER SET-BACK RATCHET



Registers One for Each Throw of Lever

Moving through an angle of 45 de-

It can be reset to zero by turning knob once around. Equipped with spring to return the lever to its operating position.

Each

No. Z13—Nickel Plated, with 5 Figures.......\$6.00

This Counter can be furnished with a thumb lever for hand purposes.

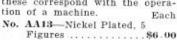
One in a Box.

#### COUNTERS

#### VEEDER SET-BACK REVOLUTION

For Recording Production of Machines

Check up operator's work. register revolutions of a shaft or reciprocating movements, where these correspond with the operation of a machine.





#### VEEDER STAR REVOLUTION



Registers in Either Direction Registers one figure when steer wheel is moved one point or one-fifth of a revolution. It is operated by a pin or roller on a revolving part of the machine

to which it is attached. Each No. 7-Nickel Plated with One in a Box.

# HAND TALLY REGISTERS

VEEDER

Nickel Plated

The Case is small with round corners, so as not to irritate the hand or wear the pocket, used as a traffic register by conductors, gatemen, steamboat inspectors; as an attendance register by theatres, libraries, churches; as a stock counter by concerns taking inventory; as a pole counter by telephone and electric line crews; as a tree counter by nurserymen and foresters. Also used



in mines, lumber camps, ranches, stockyards. Registers one for each pressure of thumb lever and sets back to zero from any figure by one turn of knob at right. Each 

One in a Box.





#### Nickel Plated

Used by railroad men, telegraph and steamboat men for checking in passengers and all kinds of freight, by conductors. waiters, traffic officers, ticket takers, stores, theatres, mines, lumber camps, etc.

Each ...84.00 space than a watch. Can be set at zero when new count is desired. One in a Box.

# CYLINDER GAUGES

STARRETT

For Motor Service Station

After the variation of the bore has been determined, note the reading on the dial and transfer to an outside micrometer for diam-

Of rugged construction with a nonbreak-able crystal over the dial. The dial is mounted on a block which moves at right angles to the sled. The sled has two line contact points. Two hardened contact points independently cause the hand to travel over the dial reading in .001 and with a unique double spring action makes the gauge selfcentering and absolutely non-collapsible.

Provisions for diameters varying from 2 1/2 to 6 in. are made by two adjustable rods carried in the hollow handle.

Nickel Plated Each 

#### ENGINEERS GAUGES STARRETT



#### Taper, Wire and Thickness Gauge

This Gauge is especially designed for the use of marine engineers, machinists and others desiring a set of gauges in compact form.

The taper gauge shows the thickness in 64ths to 16 of an inch on one side, and on the reverse side is graduated as a

rule 3 in. of its length, reading in 8ths and 16ths of an inch. The wire gauge, English Standard, shows, on one side sizes numbered from 19 to 36, with two extra slots, one the other 1/4 of an inch, and on the reverse side shows the decimal equivalents expressed in thousandths. This gauge has also 9 thicknesses or feeler gauge leaves, approximately 4 in. long, of the following thicknesses: .002, .003, .004, .006, .008, .010, .012, .015 and 16 of an inch all folded within the case, which is convenient to handle or to carry in the pocket. Each No. 245—Case 4 % in. Long...... 85.00

One in a Box. TAPER GAUGES

STARRETT For Determining Size of Holes

in Dies, etc. Made from Spring Tempered Stock.

an Inch......\$5.50

Each No. 269A-2 1/2 in, Long, with 8 Leaves, Graduated to Read 1/10 to 1/2 in, by Thousandths of



No. 269B-2 % in. Long, with 10 Leaves, Graduated to Read ½ to 1 in. by Thousandths of an Inch.. \$6.75 One in a Box.

#### FILLET OR RADIUS GAUGES STARRETT

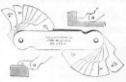


With Concave and Convex Leaves

This Gauge may also be described as a concave and convex gauge, and is especially adapted for use in laying out special forming tools, dies, etc., as well as for measuring fillets. Each

No. 178A-Has 30 Leaves Stamped to Indicate Radii by 64ths, from 32 to 14 in. (One-half Diametric Size), Diameters are from 1 to ½ in., Varying by 32nds

No. 178B—Has 32 Leaves Stamped to Indicate Radii by 64ths, from 11 to 1/2 in., Diameters are from 11 to 1 in., Varying by 32nds.....



#### Affords Means of Obtaining the Radii of Fillets, Corners, etc.

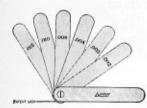
Each blade is stamped with the radius in 64ths, the external being on one side and the internal on the other. It can be used in any position or at any angle, the formation allowing it to be used up to a shoulder, and for duplicating sample pieces. The studs holding blades in place are eccentric with the round end of case. This is of advantage as when the gauge is opened the edge of case stands well away from the edge of blades. No. 272A—Has 16 Blades with Radii from 1/2 to 1/4 in.

Inclusive by 64ths..... No. 272B—Has 16 Blades with Radii from 32 to 33 in.

Inclusive by 64ths..... 1.80

# THICKNESS GAUGES

#### LUFKIN

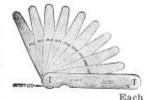


#### For Automotive Service

Useful in determining the clearance of tappets, fitting pistons and adjusting spark gap. It has the patent lock feature, one or more leaves can be locked by the same hand in which the tool is held.

#### With Tapered Leaves

Particularly popular because they give access to narrow openings. They are equipped with the patent lock, which makes possible the clamping of one or more leaves in position for measuring.



No. 110T-10 Leaves, Same as No. 109T, with Addition of .0025 Leaf, Weight Each 1 Oz...... 1.65

No. 126T—26 Leaves, 3 in. Long, Tapered to ¼ in., Thicknesses: .0015, .002, .0025, .003, .004, .005, .006, .007, .003, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024 and .025, Weight Each 2 Oz. . . . . . . 3.50

One in a Box.

#### With Patent Lock

The special feature of this gauge is the wide range of sizes. All leaves are tempered steel, ground to exact thickness and clearly marked with its thickness.

No. 126—With 26 Leaves, 3 in. Long, ½ in. Wide, Thicknesses: .0015, .002, .0025, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, .025, Over All Length of Gauge with Leaf Extended and Locked 6 in.; this Gauge Gives the Widest Range of Sizes, Weight Each 2 Oz. . . . .83.50

One in a Box.

#### With Patent Lock

Especially adapted for automobile mechanics use. The patent lock nut feature permits one or more leaves being locked and held firmly in position. This is an important feature in making adjustments



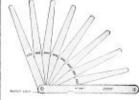
on tappets on motors. Nine leaves, viz.: .0015, .002, .003, .004, .006, .008, .010, .012 and .015.

No. 109—Case 3 in. Long by ½ in. Wide, Leaves 2 % in. Long by ½ in. Wide, Weight Each 1 Oz....\$1.50

One in a Box.

## THICKNESS GAUGES

#### LUFKIN EXTRA LONG



#### With Tapered Leaves

These gauges are particularly adapted for use in narrow and deep openings. They are equipped with the patent lock, which makes possible the clamping of one or more leaves in position for measuring.

No. 208—8 Leaves, 4½ in. Long, ½ in. Wide at Base, Tapered to ¼ in., Thicknesses: .002, .003, .004, .006, .008, .010, .012, .015, Length of Gauge with Leaf Extended 9 in., Weight Each 1½ Oz.. \$2.50

#### STARRETT

#### With Standard Range of Sizes

The leaves fold within the case which is 2 % in. long, a convenient size to carry in the pocket.





#### For General Machinists and Tool Makers

	Each
No.	172A-Case 3 % in, Long x 1/2 in. Wide, Leaves
	3 in Long x 1/2 in Wide
No.	172B—Case 4 % in. Long x ½ in. Wide, Leaves
	4 1/2 in. Long x 1/2 in. Wide 2.50
No.	172C-Case 6 1/4 in. Long x 1/2 in. Wide, Leaves
	6 in. Long x ½ in. Wide

Size A has nine leaves, viz.: .0015, .002, .003, .004, .006, .008, .010, .012 and .015.

Sizes B and C have eight leaves the same as A with

Sizes B and C have eight leaves the same as A with the omission of .0015. One in a Box.

#### STARRETT EXTRA LONG



#### For Motor and Machine Construction Work

Used extensively by users of various devices for honing and regrinding engine cylinders to determine proper clearance when fitting pistons.

Each

#### THICKNESS GAUGES BROWN & SHARPE



#### With 22 Blades

The thickness of each blade is designated by the number upon it. Each blade may be used singly or in combination with others and any thickness in thousandths within their limits may be quickly obtained.

Ea Wide

No. 640—With 22 Blades, 2 fg in. Long, fg in. Wide, Varying in Thickness from .004 to .025 in. by Thousandths of an inch, Weight Each 2 Oz....\$2.50

#### With 9 Blades

Fach
No. 642—With Blades, 2 ½α
in. Long, ½α in. Wide,
Ground to the Following
Thicknesses: .0015, .002,
.003, .004, .006, .008,
.010, .012 and .015,
Weight Each ½ Oz. \$1.50



With 9 Extra Long Blades

Each

No. 644—With Blades 3 in. Long and ½ in. Wide, Otherwise Same as No. 242, Weight Each 2 Oz..\$1.50 One in a Box.

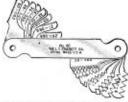
## THICKNESS GAUGE STOCK

Gauge Number Stamped on Each Length To meet the demand for thickness gauge stock only, in long pieces, we can supply any standard thickness in the following lengths:

 Length, Inches
 6
 12
 18

 Each
 \$0.40
 80
 1.20

# SCREW PITCH GAUGES



#### Polished Steel, V Threads

This gauge can be used inside a nut as well as on the outside of a screw or bolt.

Decimals are stamped on each blade to show the double depth of thread. Each

### Polished Steel, V Threads

Decimals are stamped on each leaf to show the double depth of thread. The teeth are sharp and clean cut. It can be used inside of a nut as well as on outside of a screw or bolt.



## SCREW PITCH GAUGES

STARRETT

STARRETT POSITIVE STOP

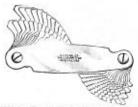


#### Polished Steel, V Threads

This gauge has a positive stop which holds the blade in a fixed and convenient position for use.

No. 473—30 Pitches, Threads Per Inch, 6, 7, 8, 9, 10, 11, 11½, 12, 13, 14, 15, 16, 18, 20, 22 in One End, and 24, 26, 27, 28, 30, 32, 34 36, 38, 40, 42, 48, 50, 56 and 60 in the Other End....\$1.80 No. 475—26 Pitches, Threads Per Inch, 3½, 4, 4½, 5,

#### STARRETT U. S. STANDARD



#### With Tool Grinding Gauge

Each

No. 155—25 Pitches, Threads Per Inch, 2¼, 2%, 2½, 2%, 2½, 2%, 3, 3¼, 3½, 4, 4½, 5, 5½, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 20........\$2.00
Also a center gauge with coarse and fine notch.

One in a Box.

#### STARRETT WHITWORTH STANDARD



### For Whitworth Standard Thread Only

Each

#### BROWN & SHARPE



#### Triangular Frame

The triangular form of the frame of this Screw Pitch Gauge permits a compact housing of 51 blades for measuring threads of nuts as well as of screws.

# THREAD LIMIT GAUGES

G-T-D



#### A. S. M. E. Standard for Internal Threads

We call attention to the extra length of the "Go" gauge, which helps to distinguish it from the "Not Go."

Our gauges are made to the limits specified below. We will furnish double ended Style No. 1520, if specified, at same price of pair, Style Nos. 1550 and 1551. All sizes, pitches and threads not listed are special, and subject to special prices.

	Threads Per Inch ASME Std.		Per Pair	Pitch	Diam.	Style	1550	
Screw Gage			Style Nos. 1550	"Go" Gage	"Not	Lgth.	Length, Over,	
Nos.	Fine Series	Co'rse Series	and 1551.	(basic p. d.)	Go" Gage	Thr'd, Inch.	All, Inches	Lgth .1129 Thr'd
0	80 72		\$14.00 14.00	.0519 .0640	.0538	1/4 1/4	1 % 1 33	10c
1 2	64	64	14.00 14.00	.6629 .0759	.0651	14	155	18 34
3 3	56	48	14.00 13.00 13.00	.0744 .0874 .0855	.0767 .0897 .0880	11 11	1 76 1 76	14
4	48	40	13.00 13.00	.0984	.1010	100	1 % 1 %	1/4 1/4
5	44	40	12.00 12.00	.1102	.1129	7	1 % 1 %	1/4
6 8 8	36	32	12.00 12.00 12.00	.1218 .1177 .1460	.1246 .1208 .1489	98 98	1 % 1 %	14
8	32	32	12.00 12.00	.1437	.1468	14	2 14	1/4
10 12	28	24	12.00 12.00	.1629 .1928	.1664	1/2	2 12 2 12 2 12	14
12 14	··· 24	24	12.00 12.00	.1889	.1924	1/2	2 18	14

Gauge No. 14 also furnished with 20 threads. Pitch diameter, Go .2095, Not Go .2132.

G-T-D



#### U. S. and S. A. E. Standard for Internal Threads

We call attention to the extra length of the "Go" gauge, which helps to distinguish it from the "Not Go."

Our gauges are made to the limits specified below. We will furnish double ended Style No. 1520, if specified, at same price of pair, Style Nos. 1550 and 1551. All sizes, pitches and threads not listed are special, and subject to special prices.

	Thre	eads	60 C000-80	Pitch	Diam.	Styl	e 1550	Style No.
Size	Per	Inch	Per Pair Style Nos. 1550 and 1551	"Go"	"Not	Lgth.	Length, Over	1551 Lgth
	USS.	SAE.		Gage (basic)	Gage Inch.	Thr'd, Inch.	All, Inches	of Thr's Inch
· · · · · · · · · · · · · · · · · · ·	20	28	\$10.60 10.60 10.60 10.60	.2175 .2268 .2764 .2854	.2211 .2302 .2801 .2889 .3382	1/2 1/2 5/8 1/2	21 12 22 23 23 23 23 23 23 23 23 23 23 23 23	14 14 18 18
我就是我就要你就还是我妈妈就是我们的第三	16  13	24	11.20 11.20 11.20 11.20 11.80	.3344 .3479 .3911 .4050 .4500	.3514 .3950 .4086 .4539	74 76 78 18	0.78 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	78 % 10 10
福表表验	12 11	18	11 S0 13.20 13.20 13.20	.4675 .5084 .5264 .5660	.4713 .5124 .5302 .5701 .5927	1 18 1 14 1 17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 15 3 15 3 74	1/2 1/2 1/2 1/2 1/2
A STANSFORM	10	18	13.20 14.60 14.60 16.00 16.00	.5889 .6850 .7094 .8028 .8286	.6893 .7134 .8072 .8326	1 th 1 th 1 th 1 th	3 % 4 % 3 % 4 % 4 14	100
1 1	8	18	16.00 16.00 17.40 17.40	.8389 .9188 .9536	.8430 .9234 .9579	1 1/2	4 14 4 18 4 18	10 84 84

# ADJUSTABLE THREAD LIMIT GAUGES

G-T-D

| Compared to the compa

No. 1556 (Pair).

#### A. S. M. E. Standard for External Threads

"Go" thread gauges have one corner flattened to help distinguish them from "Not Go" gauges.

Our gauges are made to the limits specified below. Gauges made to other than regular limits will be considered special. All sizes, pitches and threads not listed are special, and subject to special prices.

Screw Gage Nos.	Threads Per Inch.		Per Pr.			Rec-		Setting
	ASME		Style No. 1552 and No. 1553	"Go" Gage	"Not	angle Size,	Thick- ness, Inches	Style
	Fine Series	Co'rse Series		(basic p. d.)	Go" Gage	Inches		No. 1556 Per Pr.
0	80 72	64	\$14.00 14.00	.0519	.0505	1 & x % 1 & x %	1/4 1/4	\$14.00 14.00
1 2 2	64	64	14.00 14.00 14.00	.0629 .0759 .0744	0613 $0743$ $0727$	1 6 x % 1 6 x % 1 6 x %	1/4 1/4 1/4	14.00 14.00 14.00
1 2 3 3 4 4 5 5	56 48	48	13.00 13.00	.0874 .0855 .0985	.0857 .0836 .0966	16x % 16x % 16x %	14 14 14	13.00 13.00 13.00
4 5	44	40	13.00 13.00 12.00	.0958 .1102	.0937 .1082	1 & X %	NATURAL PROPERTY OF THE PROPER	13.00 12.00
6	40	40 32	12.00 12.00 12.00	.1088 .1218 .1177	.1067 .1197 .1154	16x % 16x % 16x %	14 14 14	12.00 12.00 12.00
6 8 8 10	36		12.00 12.00	.1460	.1438	1 % x %	14	12.00 12.00 12.00
10 12	28	24	12.00 12.00 12.00	.1697 .1629 .1928	.1674 .1603 .1904	1 A X % 1 A X % 1 ½ X 1	12	12.00 12.00
12 14	24	24	12:00 12:00	.1889	.1863	1 1/2 x 1 1 1/2 x 1	10	12.00 12.00

Gauge No. 14 also furnished with 20 threads. Pitch diameter, Go .2095, Not Go .2132.





Constant Sept.



No. 1556 (Pair)

#### U. S. and S. A. E. Standard for External Threads

		eads Inch	Per Pr	Pitch	Diam.	Rec-	ma de la	Setting
Size	uss.	SAE.	"Not Go" Ring Gages	"Go" Gage (basic p. d.)	"Not Go" Gage	angle Size, Inches	Thick- ness, Inches	Plugs Style No. 1556 Per Pr
1/4	20		\$10.60 10.60 10.60 10.60	.2175 .2268 .2764 .2854	.2155 .2248 .2743 .2834	1 x1½ 1 x1½ 1 x1½ 1 x1½	रीय रीय रीय रीय रीय रीय रीय	\$10.60 10.60 10.60 10.60
% % 17	16	24	11.20 11.20 11.20 11.20 11.80	.3344 .3479 .3911 .4050	.3323 .3459 .3889 .4029 .4478	1 x1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1	76 36 36 36 36	11.20 11.20 11.20 11.20 11.80
1944年	13	20	11.80 13.20 13.20 13.20	.4675 .5084 .5264 .5660	.4654 .5062 .5243 .5637	1%x1% 1%x1% 1%x1%	78 % 77	11.80 13.20 13.20 13.20
98 86 84 94	11 iò 	18 16	13.20 14.60 14.60 16.00	.5889 .6850 .7094 .8028	.5868 .6827 .7072 .8004	14 x1 % 14 x2 14 14 x2 14 14 x2 14	12 12 12 12 12 12 12 12 12 12 12 12 12 1	13.20 14.60 14.60 16.00
76 76 76 1	8	14 18	16.00 16.00 17.40 17.40	.8286 .8389 .9188 .9536	.8262 .8366 .9163 .9512	14 x2 % 14 x2 % 13 x2 % 13 x2 %	5% 5% 5% 5%	16.00 16.00 17.40 17.40

# PLUG AND RING THREAD GAUGES



No. 1503.

No. 1502.

### Basic A. S. M. E. Machine Screw Threads

All sizes, pitches, and threads not listed are special. Left hand and multiple threads are special.

Screw Gage, Nos.		No. of Threads Per Inch.			Plug Style No. 1502.		Ring Style No. 1503.	
	ASME	Std.	Also	Per Pair		Lgth. Over		Size of
	Fine Series	Co'rse Series	Fur- nish'd		Each	All, Inch.	Each	Rec- tangle
0 1 23 3 4 5 6 7 8 9 10 12 *14 *16	80 72 64 548 44 40 36 32 22 24	64 56 8 44 0 4 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	36 36 36 30 30 24 30 20 20	\$14.00 14.00 14.00 13.00 13.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00	87.00 7.00 7.00 6.50 6.50 6.00 6.00 6.00 6.00 6.00 6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$7.00 7.00 6.50 6.50 6.00 6.00 6.00 6.00 6.00 6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
*18 *20 *22 *24 *26 *28 *30			18 16 18 14 16 16	Prices on Ap- plica- tion	Prices on Appli- tion	211 3 % 3 % 3 % 3 % 3 %	Prices on Appli- tion	1 ½ x1 1 ½ x1

\*Omitted from list of standard sizes recommended by A. S. M. E. and National Screw Thread Commission.







No. 1504. No. 1502.

No. 1503.

#### Basic U. S. and S. A. E. Standard Threads

Ring Gauges, Style No. 1504, smaller than 1 in. furnished at regular prices.

Sizes of plugs and rings up to 1 1/2 in, S. A. E. Standard and 2 in, U. S. S. are regularly carried in stock for immediate shipment.

All sizes, pitches and threads not listed are special and subject to special prices. Left hand and multiple threads are special.

	Threads Per Inch.		Plug, S	Plug, Style No. 1502			Ring Style, Nos. 1503-04		
Size	USS,	SAE.	Each	Lgth. Over All, Inch.	Lgth. of Plug, Inch.	Each	Size of of Rec- tangle or O. Diam. Ring, In.	Thick- ness, Inches	
14 - 15 - 15 - 15 - 15 - 15 - 15 - 15 -	20 18 14 12 11 11 10 9 9 9 8 7 7 6 6 6 5 5 4 4 5 5 5 5 5 5 6 6 7 7 7 7 7 7 7 7 7 7 7 7	28 24 24 20 20 18 16 16 14, 18	\$5.30 5.30 5.60 6.60 7.30 8.00 8.70 8.70 8.70 9.50 10.20 11.50 11.20 12.20 13.70 14.65	01-01-05-05-05-05-05-05-05-05-05-05-05-05-05-	36 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	85.30 5.30 5.60 5.60 6.60 7.30 8.00 8.00 8.70 9.50 11.50 12.20 12.20 13.70 14.65	1 XIXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	· · · · · · · · · · · · · · · · · · ·	

Note—Length of plugs and thickness of rings given above are for gauges with U. S. S. threads. S. A. E. Std. thread gauges are respectively shorter and thinner.

# PIPE THREAD GAUGES



No. 15

No. 1560

No 1569

#### American (Briggs) Standard

		Ta	aper Thre	ads	Straight	Threads
Size Threa	No. Threads Per Inch	Plug and Ring, Per Set	Plug Style No. 1560, Each	Ring Style No. 1561 or 1562, Ea.	Style No.	Ring Style No 1503 or 1504
36	27	\$15.00	\$ 7.50	\$ 7.50		
34	18	17.00	8.50	8.50	1	
34 96 36	18	20.00	10.00	10.00		=
16	14	23.00	11.50	11.50	9	.2
34	14	26.00	13.00	13.00	20	at
1	11 1/2	29.00	14.50	14.50	Application	Application
134	111/2	32.00	16.00	16.00	d	-
1 1/2	111/2	36.00	18.00	18.00	AI	A,
2	111/2	42.00	21.00	21.00	100	
21/2	8	50.00	25.00	25.00	on	no
3	8	60.00	30.00	30.00		27.00
31/2	8	70.00	35.00	35.00	5	90
4	8	80.00	40.00	40.00	Price	Price
4 1/2	8	90.00	45.00	45.00	-	-
5	8	100.00	50.00	50.00		
6	8	120.00	60.00	60.00		

We can furnish "master" and "reference" pipe thread gauges. Prices and deliveries on application.

## LIMIT SCREW PITCH GAUGES

G-T-D



These gauges are made so that the same gauge is suitable for inspecting both U. S. form and V form of thread. Other gauges are necessary for inspecting Whitworth form of thread. Limit

Pitch Gauges for American (Briggs) Standard Taper Pipe Threads are also furnished. Each

S. S. or Whitworth Form of Thread) . . . . . 4.00 No. 1581C—8 to 27 Pitch Inclusive, 4 in. Long (American (Briggs) Standard Taper Pipe) . . . 6.00

The following pitches are regularly furnished: 3, 3½, 4, 4½, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 20, 22, 24, 28, 30, 32, 36, 40, 44, 48, 50, 56, 64, 72, 80, and in taper pipe threads 8, 11½, 14, 18, 27.

#### G-T-D IN SETS



We furnish limit screw pitch gauges for U. S. and Whitworth form of thread in sets, each set in a hardwood box as listed below.

No. 1587—Set of 24 Gauges ..... 96.00

Suggested pitches for set No. 1587: 4, 43/2, 5, 53/2, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 20, 24, 28, 30, 32, 36, 44, 48, 56.

# THREAD LIMIT SNAP GAUGES



With Anvils and Setting Plugs for U. S. Form of Thread

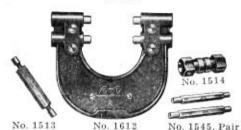
Ga	imit Snap   ges, No. 1621	Setting Plugs, Style No. 1556. For Thread Limit Snap Gages.						
Frame Nos.	Gage Only,	Size		Threads Inch.	Per Pair			
2100,	Each		USS.	SAE.	201 201			
1	\$ 8.00	3/4	20	28	\$10.60			
2	9.00	10	18	2.4	10.60			
3	10.00	3/8	16	2 4	11.20			
4	11.00	Ver	14	2.0	11.20			
5	12.00	1/2	13	20	11.80			
6	12.50	7.	12	18	13.20			
7	13.00	5/8	11	18	13.20			
8	13.50	11	*	*	- 6			
9	14.00	8.	10	16	14.60			
10	15.00	13						
11	16.00	7/8	9	14 or 18	16.00			
12	17.00	10			8			
13	18.00	1	8	14	17.40			
14	19.50							

For sizes requiring large anvils, add \$2.00 to price of rauge.

\*Prices on application. Sizes larger than 1 in., price on application.

# PLAIN LIMIT GAUGES

G-T-D



Style Nos. 1612, Snap Gauge; 1513, Setting Plug for sizes under ¼ in.; 1514, Setting Plug for sizes ¼ to 2 in.

inclusive; 1545, Setting Plugs for sizes over 2 in.
In ordering specify "Go" and "Not Go" sizes actually to be gauged, and give number of frame required.

The adjustment of anvils is such that ranges given for each frame can be exceeded by approximately + and  $-\frac{1}{32}$ 

Frame Nos.	Range in Inches	Gage Only, Style No. 1612	Setting Plugs for Maximum & Minimum Size
1	0 - 1/2	\$ 7.25	\$ 8.00
2	1/2 - 1	7.75	9.20
3	1 - 1 1/2	8.25	9.60
4	1 1/2 - 2	8.75	10.00
5	2 - 2 1/2	9.25	10.20
6	2 1/2 - 3	9.75	10.40
6 7 8	3 - 3 1/2	10.25	10.60
8	3 1/2 - 4 1/4	10.75	11.00
9	4 1/2 - 5	11.25	11.20
10	5 - 6	11.75	11.60
11	6 - 7	12.50	12.00
12	7 - 8 1/2	13.50	12.60
13	8 1/2 - 10	14.50	13.20
14	10 -12	16.00	13.40

# TABLE FOR ORDERING THREAD LIMIT SNAP GAUGES

Style No. 1621.

The following table is for use in ordering gauges. By it the purchaser can determine the correct size of frame for a given pitch and diameter.

Special sizes more than .015 in. larger than tabulated require the next larger frame. Sizes marked (\*) are regularly carried in stock.

Pitch		Frame Number and Capacity, Inches						Frame Number and Capacity, Inches							
	1	2	3	4	5	6	7	Pitch	8	9	10	11	12	13	14
16	* 1/8 to 33							32	3 %	4 70	5 🖧	6 76			
2	* 1/8 to 11	3/4	1 1/6	1 16	2	2 1/2	3	28	3 %	4 76	5 78	6 70			
8	* 1/4 to 1/1	* 34	1 1/8	1 16	2	2 1/2	3	27	3 5%	4 70	5 70	6 76			
7	* 1/4 to 1/4	* 34	1 1/4	1 %	2	2 1/2	3	24	311	4 1/2	5 1/2	6 1/2	8	9 1/2	1136
4	* 1/4 to 18	* 13	1 %	1 %	2 10	2 %	3 74	20	3 11	4 1/2	5 1/2	6 1/2	8	9 1/2	1114
0	* 1/4 to 18	* 12	*1 13	*15%	*21	*2 16	3 13	18	3 11	4 1/2	5 1/2	6 1/2	S	9 1/2	111%
8	* 1/4 to 18	* 17	*1 %	*1 5%	*216	*2 0	3 10	16	*311	*41/2	5 1/2	6 1/2	8	9 1/2	1136
5	* 1/8 to 1/8	* 18	*1 75	*15%	*27	*2 2	*3 10	14	*311	* 4 1/2	5 1/2	6 1/2	8	9 1/2	111%
1	% to 12	* 15	*1 %	*15%	*216	*2 16	*3 15	13	3 3/4	4 70	5 %	6 18	816	9 %	11 %
3		* 3% to 3%	11/4	1 11	2 1/8	2 %	3 1/8	12	*3 %	*436	5 %	6 %	8 %	9-75	11%
2		* % to %	*114	*1 11	*21%	*2 %	*31/8	11	3 %	476	5 //4	6 16	878	9 26	11%
1		* % to %	*114	1 11	2 1/8	2 %	3 1/8	10	*3%	*4%	5 %	6 %	8 16	9.70	11%
0		* % to %	*11/4	*1 11	*21/8	*2 %	*31/8	9	311	4 %	5 %	6 %	8 1/8	9 %	11%
9		* % to %	*114	1 11	2 3	2 11	3 1%	8	3 13	4 %	5 %	6 5%	8 1/8	9 %	115%
8		% to %	*11/4	*111	2 %	2 11	3 /	7	3 %	411	518	615	8 18	9 11	1111
7		36 to 34	*1 %	*1%	2 1/4	2 34	3 1/4	6	3 7/8	411	511	6 14	8 16	9 11	1111
6		1/2 to 3/4	1 1/1	*11/2	21/4	2 %	3 1/4	5 1/2	4	4 %	5 3/4	6 %	8 1/4	9 1/4	1114
536		1/2 to 3/4	1 16	1 1/2	*1 18	2 1/2	3	5	4	4 %	5 34	6 %	8 1/4	9 1/4	111%
5"		1/2 to 3/4	115	11/2	*1 13	2 1/2	3	4 1/2	4	4.34	5 34	6 34	8 1/4	9 14	11%
136			34-11/8	1 %	* 2	2 1/2	3	4	3 %	4 1/2	5 1/2	6 3/2	8	9	11

#### DEPTH GAUGES LUFKIN

#### With Narrow Tempered Steel Rule

Steel heads case hardened and finished, 21/2 in. wide across the base, 1/8 in. thick. Heads are notched on one side, so gradua-tions can be easily read. Blades are tempered, machine divided, and fitted in slot of the head. They can be securely clamped at any point by means of the knurled lock nut. Blades are also removable for use simply as scales.

No. 510—With 6 in Narrow Spring Tempered Steel Rule Graduated 





#### Depth Gauge and Protractor

Heads are case hardened steel and nicely finished, 2 1/2 in. wide across base and 1/8 in. The heads are notched on one side so graduations can be easily read. All blades are tempered and machine divided and fitted in slot in head. They may be securely clamped at any point by means of the knurled lock nut. One side of head is marked with 30, 45 and 60 degree lines to which the blade can be swung and set converting the tool into a protractor.

Each No. 511-With 6 in. Narrow Spring Tempered Rule, Graduated 32nds and 64ths inch..... No. H511-With 6 in Narrow Hook Rule, Otherwise Same as No. 511.....

One in a Box.

# LUFKIN IMPROVED

With Round Graduated Blade

The distinctive feature of this gauge is that the blade, while round is graduated. It is but 1/10 in. in diameter and gives access to small holes. The base is 2 1/2 in. wide. Measurement is arrived at without the additional use of a rule.

Each No. 512-With 6 in, Rule Graduated 4 inches in 32nds of an inch....\$1.50 One in a Box.

#### STARRETT

With 6 in. Blades

Case Hardened Steel Base, Nickel Finished. The blade which is conveniently held in the groove of the head by a knurled lock nut, is a 6 in, narrow spring-tempered rule, and can be used separately from the gauge. Blades graduated in 32ds and 64ths of an inch will be sent unless otherwise ordered, but we can also supply them graduated in 50ths and 100ths, or 64ths and 100ths Each

No. 237-Base 2 in. Wide, 1/8 in. Thick . . . \$1.50 One in a Box.

200

ACCUMULT.

#### STARRETTT

#### With Narrow Tempered Steel Rule

Has a graduated scale indicating exact measurements, and may be used separately from the gauge.

Rule graduated in 32nds and 64ths of inches; furnished with

64ths and 100ths it so	ordered.			1000	
Nos	46A	46B	46C	46D	46E
Length Stock, Inches	3 1/2	3 1/2	6	6	10
Length Scale, Inches	4	6	4	6	6
Each	\$1.50	1.80	1.80	2.10	2.70
0	ne in a	Box.			

#### DEPTH GAUGES STARRETT

#### With Rod

The wire is held to a groove by a friction spring inside the nut while adjusting, and may be used close up to the end, as well as in the middle of the straight edge. By loosening the nut, the gauge may be neatly folded.

Nos	45A	45B	450
Length Stock, Inches	3 1/2	6	10
Length Rod, Inches	3 1/2	6	6
Each	\$0.90	1.40	1.65
A One in	a Box.		

## STARRETT MICROMETER

#### With Single Rod

(Tr

Tell School or Po.

It has 1/2 in. movement of the screw, reading in thousandths, and with two 1/2 in. and one 1 in. standard collars to slip off or on the spindle, 21/2 in., reading in thousandths, can be obtained. The split nut is covered and protected by a patent graduated sleeve, which protects the nut from dirt and provides an accurate way of taking up wear and adjusting the micrometer to insure correct reading

Nos.					446A	446B
Size	Base, I	nches.			2 1/4	4
					87 . 75	8.50
Case	-Extra				1.25	2.00
	Sent	with	Case	unless	otherwise ordered	

#### BROWN & SHARPE MICROMETER

#### Range 0 to 21/2 inches, by Thousandths

Screw has 1/2 in. movement. Adjusting rod is graduated each 1/2 in. and the deep graduations that the clamping fingers at end of gauge spring in and allow the 1/2 in, adjustment of the rod to be quickly and positively

mage.		
Nos	605A	605B
Size of Base, Inches		4
Each	88.75	9.50
Case—Extra	1.25	2.00 (

Sent with Case unless otherwise ordered.

#### BROWN & SHARPE RATCHET MICROMETER

Range 0 to 3 inches by Thousandths Micrometer screw has a movement of 1 in. The range is obtained by three measuring rods furnished. The rod desired is inserted in the gauge through a hole in the micrometer. screw. The rods measure 0 to 1, 1

5 1	to 2 and 2 t	to 3 in		
E 1	Nos		607A	607B
	Size Base, I			4
$\sim$	Each		89.50	12.00
Г	Case—Extra		1.80	2.20
	2	Sent	with Case	unless

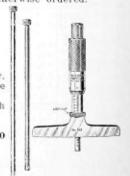
#### LUFKIN MICROMETER

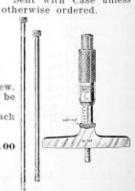
#### With Three Measuring Rods

Has 1 in. movement of the screw. A lock-nut allows the gauge to be set and held at any reading.

Each No. 513—3 in. Base, Range 0 to 3 in. by Thousandths of an inch......\$9.00

One in a Box.





#### CENTER GAUGES LUFKIN



For Use in Grinding and Setting Screw Cutting Tools Graduated in 14ths, 20ths, 24ths and 32nds for Meas-

uring Threads Per Inch.

A valuable feature of this gauge is that it carries a table of double depth figures, used in determining the tap drill sizes of sharp 60°, V Threads. Allowance is to be made for the extent to which thread is flattened, as it is not practical to tap a perfectly sharp thread. Each 

#### Six in a Box. STARRETT



For Use in Grinding and Setting Screw Cutting Tools Graduated in 14ths, 20ths, 24ths and 32nds for Measuring Threads Per Inch, Except Nos. 397 and 398 which are m/m. Each No. 390-U. S. Standard, 60°, Not Tempered . . . . . 80.40 . 50 No. 391-U. S. Standard, 60°, Spring Tempered.... No. 395—Whitworth Standard, 55°, Not Tempered. No. 396—Whitworth Standard, 55°, Spring Tempered .40 Six in a Box.

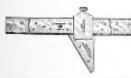
#### BROWN & SHARPE



For Use in Grinding and Setting Screw Cutting Tools Graduated in 14ths, 20ths, 24ths and 32nds for Measuring Threads Per Inch. Each .40 No. 651-Whitworth or English Standard 55°, Tem-.50 No. 0651-Whitworth or English Standard 55°, Not .40 Tempered ..... Twelve in a Box.

#### DRILL POINT GAUGES STARRETT

#### Adjustable



Arm Sets at 59° Angle which is Considered the Proper Angle for Grinding Twist Drills to ge: Best Results.

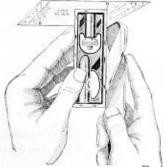
Blade Graduated 32nds and 64ths on One Side and 8ths and 16ths on the Other Side. Each

No. 22A-12 in. Blade, Weight Each ¾ Lb......\$4.90 One in a Box.

#### LUFKIN

#### Double Square Stock, with Level

Bevel Blade at one end is 59° the cutting angle of drill, the other end 41° the cutting angle of countersinks for machine screws. Blade is slotted and slides readily in the head and is held securely with thumb screw when set. Blades are graduated in 64ths inches.



Each One in a Box.

#### SCREW THREAD GAUGES BROWN & SHARPE



715 Gauge.



Acme Standard Each No. 715-29 Degrees, Complete with Tool Setting

Gauge .... ... \$3.30 This gauge is for the purpose of furnishing a correct standard to which tools can be ground to cut threads, of a uniform angle, to take the place of square threads, and to standardize the threads of various angles and depths now in use.

The sides are at an inclination of 14 1/2 degrees, or 29 degrees included angle, which is the same as is now generally adopted in cutting worms.

Six in a Box.

Tool Setting Gauge.

#### Acme Standard

Each No. 716-29 Degrees, this Gauge Furnishes a Correct Standard to which Tools can be Ground to Cut Threads of a Uniform Angle, to Take the Place of Square .....\$3.00

Twelve in a Box.



U. S. Standard

Each

No. 724-Used as a Standard for Grinding Tools to Cut Threads According to U. S. Standard, the Angles are 60° and the Flat Surfaces at Top and Bottom of Threads are Equal to One-Eighth of the Pitch . . . . . \$3.00

Six in a Box.

## WORM THREAD TOOL GAUGES

#### BROWN & SHARPE

This Gauge furnishes the correct form for tools used in turning the threads of worms, when the worm wheels are cut with involute cutters. The figures on the gauge correspond to the number of threads per inch of the worm. Each ....\$3.00 Tool Setting Gauge-Extra . .



#### Six in a Box. DEPTH OF GEAR TOOTH GAUGES BROWN & SHARPE



Depth of Gear Tooth Gauges pitches, from 3 to 48 pitch inclusive, are carried in stock. One gauge answers

for each pitch and indicates the extreme depth to be cut. Each

One in a Package.

# SHEET METAL GAUGES

BROWN & SHARPE United States Standard

Adopted by Congress, March 3, This is the legalized gauge for

determining duties and taxes levied by the United States and is the recognized commercial Standard for all uncoated sheet and plate iron and steel. It is a weight gauge having been used weights in ounces per square foot, Decimal Equivalents are stamped on the reverse side.

No. 694-0 to 36 Gauge..... Six in a Box.



#### WIRE GAUGES BROWN & SHARPE



#### American Standard

Best tempered steel.

Adopted by the Brass Manufacturers, Jan., 1858.

Decimal Equivalents stamped on reverse side.

This gauge is also known as Brown & Sharpe Standard.

	1	20.00	-																15	acı	а
	688A - 0																				
No.	688B - 5	to	36	Gauge				 0.5	1	2		٠	1.3	٠	٠,				22	. 54	,
			Si	x in a	Bo	X.					-	1			7	6	7	-	STA		

#### English Standard

Best tempered steel. Same as Stubs' Iron Wire or Birgauge. Decimal mingham Equivalents of each size are stamped on reverse side, Each gauge carefully tested after hardening.



			Each	ì
No.	690A-1 to 3	36	Gauge\$3.00	)
No.	690B-6 to	36	Gauge 2.50	)
	off HW .		Six in a Box.	



#### Washburn and Moen Standard

Best tempered steel. gauge carefully tested Each after The gauge numhardening. bers are those of the Washburn and Moen Standard used in certain sections for measuring spring steel, fence and telegraph wire, etc.

No. 692-Numbers 0 to 36, About 31/4 in. Diameter, Six in a Box.

#### BROWN & SHARPE MUSIC WIRE

#### American S. & W. Co. Standard

Best tempered steel. Each gauge carefully tested after hardening. Decimal Equivalent of each number stamped on reverse side.

This gauge carries all sizes for measuring and checking steel music or piano wire.



Each

No. 696-Numbers 6/0 to 33, About 2 in. Diameter, Six in a Box.

NECO ELECTRICIANS



#### White Metal, Finely Finished

Measures B. & S. gauge wire No. 18 to No. 3/0. On front side is also given the carrying capacity of copper wire in amperes and on reverse side the approximate decimal equivalents of various size wires.

Each No. 1E-2 in. Long. 

#### CALIPER AND WIRE GAUGES BROWN & SHARPE



English or Birmingham Standard

Tongues graduated to 32nds on both sides. Jaws are 2 in. deep. The tongue is graduated on both sides to 32nds of an inch and can be drawn out to measure 4 in. The gauge numbers run from 1 to 32,

The tool is useful for stock and store room purposes in selecting iron, steel and sheet stock, also for iron and

steel rollers use.

The slide is locked in position with a clamp nut. Each 

United States Standard, for Sheet and Plate Iron or Steel This is similar to the No. 677 Gauge, but has the U.S. Metal Gauge numbers, which run from 1 to 32. Each One in a Box.

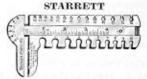
#### ROLLING MILL CALIPER GAUGES BROWN & SHARPE



Slide Secured in Position by Lock Nut

For use on heavy class of work in rolling mills, measuring sheet iron and steel. Hardened steel jaws 21/8 in. deep and can be opened to measure 4 inches. Tongue graduated on one side 32nds of an inch. Each No. 674-513 in. Long, 32 in. Thick..... .89.00

One in a Box.



For Use in Steel Mills, Jaw and Slide One Piece This gauge is made only in the English or Birmingham Standard and the United States Standard for sheet and plate iron and steel. As gauges in rolling mills are pre-ferred as compact as possible, yet strong enough to with-stand hard usage, the movable jaw and graduated slide are made in one piece. It is hardened and finished bright. Graduations first inch are 32nds, remainder 16ths. Opening of Caliper 4 in. Depth of jaws 1% in. Width 11/2 in.

No. 293A-Sizes 1 to 30, English or Birmingham ....\$13.50 One in a Box.

#### ROLLING MILL GAUGES BROWN & SHARPE



U. S. Standard For Sheet and Plate Iron and Steel, Adopted by Congress March 3, 1893.

Each No. 685-000 to 25 Gauge . . . \$4.00 Six in a Box.

English or Birmingham Standard High Grade Steel, Hardened and Tempered.



No. 684A-000 to 25..... \$4.00 Six in a Box.

#### DRILL GAUGES STARRETT TIME SAVER



#### Polished Steel, Hardened

Each No. 185—6¼ in. Long, 2% in. Wide, 3 in. Thick, Weight 4½ Oz.....82.40

Has table giving regular machine screw tap sizes, also proper drill size for same. Gauge shows wire gauge sizes from 1 to 60. Three in a Box.

#### STARRETT JOBBERS

Polished Steel, Hardened and Tempered Each

No. 187-6 1/4 in. Long, 2 3/8 in. Wide, 10 in. Thick, Weight Each 4½ Oz. \$2.75 .0000000000 00000000

This Gauge shows sizes from 16 to 1/2 in., varying by 64ths. Each size is designated by both common and decimal fractions. Three in a Box.

#### BROWN & SHARPE WIRE GAUGE

#### Tested After Hardening



Contains Gauge numbers 1 to 60 inclusive with decimal equivalents of various sizes stamped on back.

No. 705A-51/4 in. Long, 1% in. Wide, 1/6 in. Thick, Six in a -Box.

#### BROWN & SHARPE JEWELERS

Tested After Hardening

64 42 63 64 65 64 67 68 69 79 BAS. 1 12 th 14 25 16 17 16 19 40

Contains Gauge numbers from 1 to 80 inclusive.

No. 705B-2 in. Long, 34 in. Wide, 15 in. Thick, Six in a Box.

#### SCREW AND WIRE GAUGES BROWN & SHARPE POCKET





Front Side.

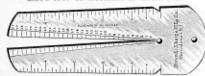
Rear Side.

Polished Steel Graduated on the front to show all sizes of the American Standard screw gauge from 0 to 30 and is designed for the measurement of wire as well as of machine and wood screws. Will also show the sizes of A S. M. E. Standard screws.

In addition to the gauge numbers, the front side of the gauge is also graduated to 32nds of an inch.

Reverse side is graduated as old or English Wire Gauge, from 17 to 0000, also new or American Wire Gauge from 15 to 0000. Each No. 700-3 in. Long . . . .\$3.00

Six in a Box. BROWN & SHARPE LARGE



Polished Steel

Graduated on both sides, American Screw Gauge 0 to 30. Also A. S. M. E. Standard and measurements of wire. The back of gauge is graduated English Wire Gauge from 17 to 0000 on the right and to 32nds of an inch on the left of slot. The outer left hand edge is graduated in 32nds of an inch. Each

Six in a Box.

#### MACHINISTS BEVELS BROWN & SHARPE UNIVERSAL



Slotted Blade and Stock

Nos	498A	498B
Length of Head and Tongue, Inches		3
Width of Head and Tongue, Inches	1/4	5/8
Each	\$2.40	2.40
One in a Roy		

#### BROWN & SHARPE IMPROVED UNIVERSAL



With Offset Blade No. 499-3 in. Long, with Offset Blade that Admits of the Measurement of All Angles, Case is Solid on the Top, for 11/2 in, from the Square End. . . \$2.00 One in a Box.

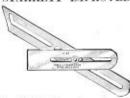
#### STARRETT UNIVERSAL



With Offset Blade

Useful for bevel gear work, etc., as any angle can be obtained. One edge of case being solid a rest is formed directly under the blade, where thin templets may be placed and accurately fitted. Each .. \$2.00 No. 15-3 in. Long..... One in a Box.

#### STARRETT IMPROVED



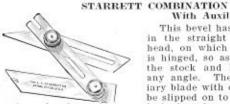
No. 47-With Clamping Screw Head

Blade,	Inches	 	6	9	12
				4 %	6
Each		 	\$1.75	2.75	3.75

The advantages of this bevel over any other tool of this kind made, consists in its having not only the blade slotted, but the stock as well, thus admitting adjustments that cannot be obtained with a common bevel.

#### One in a Box.

#### With Auxiliary Blade



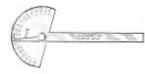
This bevel has a stud riveted in the straight edge stock or head, on which its split blade is hinged, so as to swing over the stock and be clamped at any angle. The slotted auxiliary blade with clamp bolt may be slipped on to the split blade

and can be clamped at any desired angle and used, in combination with the stock of the other, for laying out work, measuring, or showing any angle desired, and when so com-Each bined will lie flat upon its work. No. 49-4 in. Stock . .

One in a Box.

#### BEVEL PROTRACTORS

STARRETT STEEL



Graduated in Degrees 0 to 90 Both Ways

No. 19—6 in Blade \$2.25 By means of a patent lock, the joint is set firmly by a slight turn of the nut. The

back of the tool will lie flat. Convenient for setting bevels, transferring angles, as a small T Square, or for a large number of other uses.

One in a Box.

#### Graduated in Degrees 0 to 90 Both Ways

Used for setting bevels Nos. 15, 47 and 49 at any desired angle, thus converting them into bevel protractors at slight cost.



One in a Box.

#### BROWN & SHARPE DRAFTSMEN'S



Quickly Set to Any Angle Tool Steel, Accurately Ground and Polished. Used either side

and Polished. Used either side up and on either of the two outside edges of the frame. It has a vernier which reads to five minutes.

It can be used to advantage in dividing a circle, transferring angles or laying off a given angle, without resetting, on either side of a line.

The Vernier reads to five minutes.

This Protractor forms a convenient extension of a T square and frequently takes the place of 45° and 60° angles. One in a Box.

#### BROWN & SHARPE IMPROVED UNIVERSAL



#### With Acute Angle Attachment

Designed for all classes of work where angles are to be laid out, and with the acute angle attachment extremely small angles can be easily and quickly established. All measurements are accurate for the dial is accurately graduated. A Vernier which reads to 5 minutes or ½2 of a degree, adds materially to the fineness to which angles can be laid out.

One side of the tool is flat, thus permitting its being laid flat upon the paper or work. The dial is accurately graduated to degrees the entire circle, the graduated surface being depressed to protect the graduations from wear.

The blade is about 1/4 in, thick, can be moved back and forth its entire length and clamped independently of the

			Each
No.	496A-With	6 in, Blade	\$22.50
No.	496B-With	6 in. Blade, in Leather Case	24.50
No.	496C-With	12 in. Blade	23.75
No.	496D-With	12 in. Blade, in Leather Case	26.00
No.	496E-With	Both 6 and 12 in. Blades	24.50
No.	496F-With	Both 6 and 12 in. Blades, in	
	Leather Case		26.75

One in a Box.

#### BEVEL PROTRACTORS

STARRETT UNIVERSAL



#### A Graduated Disc with a Fixed Blade and Adjustable Stock

Any given angle may be laid off or measured by setting the stock at that angle by the graduated disc. This tool

has a very wide range of usefulness.

The blade is ½ in. wide and the stock is 4 in. long; both are made from sheet steel nicely finished. The tool weighs 6 oz. The disc is graduated in degrees from zero to 90° each way and rotates the entire circle on a center stud. The blade, clamped by an eccentric stud against the end of the disc, may slide back and forth its full length or turn through any angle around the circle and be clamped firmly at any point. It is thus adapted to positions impossible with other protractors and renders unnecessary the use of the common bevel in transferring angles.

One side of the center being flat makes it a convenient tool for laying on paper in drafting and it has double the utility of any similar tool.

defined of any similar coor.	Each
No. 360A-With 7 in. Blade	10.50
No. 360B-With 7 in Blade, in Leather Case	12.30
No. 360C-With 12 in. Blade	11.75
No. 360D-With 12 in. Blade in Leather Case	13.75
No. 360E-With Both 7 and 12 in. Blades	12.50
No. 360F—Same in Leather Case	14.50
No. 360G-Acute Angle Attachment, Extra	3.00
One in a Box.	

#### STARRETT IMPROVED UNIVERSAL

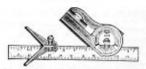


With Extremely Fine Adjustment

Similar to the No. 360 except that dial is graduated to degrees the entire circle and is equipped with a Vernier and has encased a positive method for fine adjustments. The acute angle attachment renders it available for small angles.

No.	359A-With	7 in.	Blade\$22.50
No.	359B-With	7 in.	Blade in Leather Case 24.50
			Blade 23.75
No.	359D-With	12 in.	Blade in Leather Case 26.00
No.	359E-With	Both 7	and 12 in. Blades 24.50
No.	359F-With	Both	7 and 12 in. Blades, in

# One in a Box. INCLINOMETERS STARRETT



#### No. 10-With Hardened Steel Blade

With Center Head......Each, 6.90 7.90 8.90
It consists of a stock and disc, both slotted to receive the blade, which folds in the stock. The blade attached to the graduated rotary disc may be secured at any angle from 0 to 90 degrees, and by loosening the clamp screw it may be shortened or extended full length, or removed for a straight edge.

One in a Box.

#### BEVEL PROTRACTORS

#### STARRETT



#### No. 12-With Hardened Steel Blade and Level

Blade Graduated with Heavy Figures Reading Both Ways. No. 4 Graduation: One Side 8ths and 16ths, Other Side 32nds and 64ths.

Length Blade, Inches.. 9
Each ..... \$4.50 5.10 6.00 6.90 

An adjustable rule, held firmly at any point by a thumb nut, passes through a revolving turret which is nicely graduated in degrees from 0 to 90, both right and left, can be accurately adjusted to show any angle.

One in a Box

#### LUFKIN



#### No. 5-With Hardened Steel Blade and Level

Blade Graduated 8ths, 16ths, 32nds and 64ths. Revolving Turret Graduated 0 to 90 Degrees.

Length Blade, Inches. 9 12 Each ...... \$4.50 5.10 24 6.00 6.90 5.10 

One in a Box



#### No. 6-With Hardened Steel Blade and Level Same as No. 5 with Reversible Head,

12 18 24 5.70 6.90 7.50 Head Only-With Level...... Each, \$4.20

One in a Box.

#### BROWN & SHARPE SINGLE



#### No. 450-With Hardened Steel Blade and Level

Blade Graduated 8ths, 16ths, 32nds and 64ths. Revolving Turret Graduated 0 to 90 Degrees. Length Blade, Inches. . 9 12 Each ..... \$4.50 5.10 6.00 6.90 

#### One in a Box. BROWN & SHARPE DOUBLE

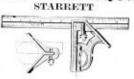


#### No. 456-With Hardened Steel Blade and Level

Same as No. 450 with Reversible Head. Length Blade, Inches.. 9 12 18 24 5.70 6.90 7.50 

One in a Box

## COMBINATION SQUARES



No. 11-With Center Head

Japanned Iron, Head and Level, Tempered Steel Blade, No. 4 Graduations: One Side 8ths and 16ths; Other Side 32nds and 64ths.

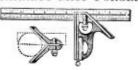
No. 11-Without Center Head

Length, Inches. 4 6 9 12 18 24 Each . . . . . . . \$1.50 1.80 2.40 3.00 3.90 4.80 The heads of the 4 in. squares do not contain Level.

Note-Unless otherwise specified these Squares will be sent with center heads.

One in a Box.

#### STARRETT DROP FORGED



No. 33-With Center Head

Hardened Drop Forged Head with Level, Tempered Steel Blade, No. 4 Graduations: One Side 8ths and 16ths; Other 32nds and 64ths.

No. 33-Without Center Head

 Length, Inches......
 6
 9
 12
 18
 24

 Each
 ......
 \$3.00
 3.60
 3.90
 5.10
 5.70

-Unless otherwise specified these Squares will be . sent with center heads.

One in a Box.

#### STARRETT SETS



No. 9-With Single Bevel Protractor

Japanned Iron Head with Level, Tempered Steel Blade. No. 4 Graduations: One Side 8ths and 16ths; Other Side 32nds and 64ths. With No. 12 Protractor. Length, Inches...... 9
Each ..... \$6.00 12

6.60 7.508.40 This Set combines the regular Starret No. 11 Combination Square with Center Head and the No. 12 Bevel Pro-

tractor to which is attached a small level which may be used to show any degree.

#### One in a Box. STARRETT DROP FORGED SETS



No. 433-With Single Bevel Protractor

Hardened Drop Forged Head with Level and Center Head, Tempered Steel Blade with No. 4 Graduations: One Side 8ths and 16ths; Other Side 32nds and 64ths. No. 492 Protractor.

Length, Inches..... 9
Each ..... \$7.50 7.80 9.00 9.60

This Set combines the regular Starrett No. 33 Combination Square with Center Head and No. 492 Protractor with Level attached. The No. 492 is the same as No. 12 Protractor except is has smooth finish to match the No. 33 One in a Box. Square.

#### COMBINATION SQUARES

LUFKIN



#### No. 25-Without Center Head

Olive Drab Finish Iron Heads with Level, Tempered Steel Blade, No. 4 Graduations, One Side 8ths and 16ths; Other Side 32nds and 64ths.

\*4 12 Length, Inches. . 18 Wt. Each, Lbs., 34 % 5% 1 % 1 % 1 % 1 % Each . . . . . . \$1.50 1.80 2.40 3.00 3.90 4.80 1/4

\*The Heads of 4 in. Squares do not contain Level. One in a Box.



#### No. 25C-With Center Head

Olive Drab Finish Iron Heads with Level, Tempered Steel Blade, No. 4 Graduations, One Side 8ths and 16ths; Other Side 32nds and 64ths.

Length, Inches. . \*4 Wt. Each, Lbs. . 18 Each ..... \$2.10 2.40 3.00 3.60 4.50 5.40

\*The Heads of 4 in. Squares do not contain Level. One in a Box.

#### LUFKIN DROP FORGED



#### No. 35-Without Center Head

Olive Drab Drop Forged Steel Head with Level, Tempered Steel Blade, No. 4 Graduations; One Side 8ths and 16ths; Other Side 32nds and 64ths.

Length, Inches..... 6 9 12 24 Weight Each, Lbs..... 3% 1 % 1% 1 % Each ...... \$3.00 3.60 3.90 5.10 5.70 One in a Box.



#### No. 35C-With Center Head

Olive Drab Drop Forged Steel Head with Level, Tempered Steel Blades, No. 4 Graduations; One Side 8ths and 16ths; Other Side 32nds and 64ths.

Length, Inches..... 6 18 24 Weight Each, Lbs.... ½ 13 Each ...... \$3.90 4.50 1 % 1 5% 4.80 6.00 6.60 One in a Box.

#### LUFKIN JUNIOR



#### With Center Head

These Squares are similar to the regular No. 25C Squares, but are of lighter weight, with small heads and narrow blades for Tool Makers' and Pattern Makers' use.

No. 135C-With Readable Graduations..... 4.40

One in a Box.

## COMBINATION SQUARES

LUFKIN SETS



No. 525-With Single Bevel Protractor

Olive Drab Finish Iron Head with Level and Center Head, Tempered Steel Blade, with No. 4 Graduations, One Side 8ths and 16ths. No. 5 Protractor. Length, Inches..... 9 12 Weight Each, Lbs.... 1 1/2

Each ..... \$6.00 7.50 6.60 8.40 This Set combines the regular Lufkin No. 25C Combination Square with Center Head and No. 5 Bevel Protractor with Level Attachment. One in a Box.

1 %

2 %

LUFKIN SETS



No. 625-With Reversible Bevel Protractor

Olive Drab Finish Iron Head with Level and Center Head, Tempered Steel Blade, with No. 4 Graduations, One Side 8ths and 16ths. No. 6 Protractor. Length, Inches..... 9 12 Weight Each, Lbs.... 1 11 2 14

7.80 Each ..... \$7.20 8.70 9.60 This Set combines the regular Lufkin No. 25C Combination Square with Center Head and No. 6 Bevel Protractor with Level Attachment. One in a Box.

#### LUFKIN DROP FORGED SETS



No. 535-With Single Bevel Protractor

Olive Drab Drop Forged Steel Head with Level and Center Head, Tempered Steel Blade with No. 4 Graduations: One Side 8ths and 16ths; Other Side 32nds and 64ths. No. 5 Protractor.

Length, Inches ..... 24 Weight Each, Lbs.... 1 % 2 16 Each . . . . . . . . . . . . . \$7.50 7.80 9.00 9.60

This Set combines the regular Lufkin No. 35C Combination Square with Center Head and No. 5 Bevel Protractor with Level Attachment. One in a Box.



No. 635—With Reversible Bevel Protractor

Olive Drab Drop Forged Steel Head with Level and Center Head, Tempered Steel Blade with No. 4 Graduations: One Side 8ths and 16ths; Other Side 32nds and 64ths. No. 6 Protractor.

Length, Inches 12 24 Weight Each, Lbs.... 2 14 2 18 2 % 88 70 9.00 10.20 10.80

This Set combines the regular Lufkin No. 35C Combination Square with Center Head and No. 6 Bevel Protractor with Level Attachment. One in a Box.

All the above Combination Squares contain scriber in head of square.

# COMBINATION SQUARES BROWN & SHARPE



No. 400-With Center Head

Hardened Drop Forged Head with Level, Tempered Steel Blade, No. 4 Graduations; One Side 8ths and 16ths; Other Side 32nds and 64ths.

 Length, Inches
 6
 9
 12
 18
 24

 Each
 ...
 \$3.90
 4.50
 4.80
 6.00
 6.60

 One in a Box,



No. 401-Without Center Head

#### One in a Box. BROWN & SHARPE SETS



No. 425-With Single Bevel Protractor

Hardened Drop Forged Head with Level and Center Head, Tempered Steel Blade, No. 4 Graduations: One Side 8ths and 16ths; Other Side 32nds and 64ths. No. 450 Protractor.



No. 438-With Double Bevel Protractor

Hardened Drop Forged Head with Level and Center Head, Tempered Steel Blade, No. 4 Graduations; One Side 3ths and 16ths; Other Side 32nds and 64ths. No. 456 Protractor.

Length, Inches 9 12 18 24

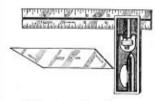
Weight Each, Lbs ... \$8.70 9.00 10.20 10.80

One in a Box.
STARRETT HEAVY STANDARD



| Destrict | Destrict

# MACHINISTS STEEL SQUARES



#### With Hardened Blades

No. 4 Graduations.

These Squares are very convenient for pattern makers, machinists and tool makers in certain classes of work. The blades are adjustable in length by moving the head. Both faces of the head are square.

The 6 in, heads are equipped with level. The bevel blade gives hexagon and octagon angles and is so marked. The Drill Grinding Blade converts the tool into a practical Drill Grinding Gauge.

#### No. 26A—With Sliding Blade Only Inches 4

Length,	Inches			+			+						4	6
Weight	Each,	Oz.			٠.				į.	4	7		2	7
Each			-			4			٠		-	٠	\$1.50	2.40

# No. 26B—With Graduated and Bevel Blades Length, Inches 4 6 Each \$2.00 3.00

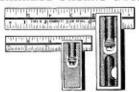
 No. 26C—With Graduated, Bevel and Drill Grinding Blades

 Length, Inches
 6

 Each
 \$4.25

 One in a Box.

#### STARRETT PATENT DOUBLE



#### No. 13—Sliding Hardened Steel Blade, No. 4 Graduation

One side 8ths and 16ths, Other Side 32nds and 64ths
The Sliding Blade, shortened or extended full length,
makes it more valuable than a full set of regular solid
squares, while with the extra bevel blade both hexagon and
octagon angles may be procured, a feature of great convenience to the patternmaker.

#### With Sliding Blade Only

Length, Inches	4	6	9	12
Each	\$1.50	2.40	3.60	4.75

## With Two Blades, One Sliding and One Bevel

 Length, Inches
 4
 6

 Each
 82.00
 3.00

 This Square is conceded the most practical one for ma 

chinists and fine tool makers ever offered.

Note—The 4 in. Square is furnished without, and the

Note—The 4 in. Square is furnished without, and the 6, 9 and 12 in. Square with Level in Stock.

One in a Box.

#### STARRETT DIE MAKERS



#### With Hardened Blades

Designed to provide means whereby the blade can be adjusted at any angle with the beam. For filing the clearance in dies, etc. By releasing small screw the fulcrum pin is forced back and the blade clamped firmly in its seat and used as a regular square.

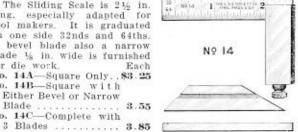
		400	_					Each
No.	453A-	-Square	Only					\$4.00
No.	453B-	-Square	with	Either	Bevel	or	Narrow	
	Blade							4.30
No.	453C-	-Square	Compl	ete with	3 Blad	es		4.60
			One	e in a E	ox.			

#### MACHINISTS STEEL SQUARES STARRETT DOUBLE STEEL

With Hardened Head and Blade

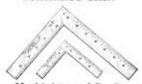
The Sliding Scale is 21/2 in. long, especially adapted for tool makers. It is graduated on one side 32nds and 64ths. A bevel blade also a narrow blade 1/8 in. wide is furnished for die work. Each No. 14A-Square Only. . \$3.25

No. 14B-Square with Either Bevel or Narrow Blade ...... No. 14C-Complete with



Each Large Size No. 14D-Stock 2 1/4 in. Long, 4 in. Graduated Blade. \$4.00 No. 14E-Same as No. 14D, with Bevel Blade Added. 4.50

One in a Box. STARRETT THIN



	For Machinists and Draftsmen Ea	ach
No. 21A-	2x1 in., 1/20 in. Thick, Graduated 16ths	
and 64	ths on One Side, 32nds and 64ths on Other	
Side .	82	10
No. 21B-	3x2 in., 1/20 in. Thick, Graduated 16ths	
and 6	ths on One Side, 32nds and 64ths on Other	
Side .		70
No. 21C-	4x3 in., 1/16 in. Thick, Graduated 16ths	
and 3	2nds on Both Sides	60
No. 21D-	6x4 in., 1/16 in. Thick, Graduated 16ths	
and 3:	2nds on Both Sides 5.	10
	8x6 in., 1/16 in. Thick, Graduated 16ths	
	2nds on Both Sides G.	60
	10x8 in., 1/16 in. Thick, Graduated 16ths	
and 3	2nds on Both Sides	. 10
	12x8 in., 3/32 in. Thick, Graduated 16ths	
and 3	2nds on Both Sides 9.	60

BROWN & SHARPE HARDENED STEEL

No. 540—Solid Steel, Hardened Edge, Not Graduated Specially Recommended as a Standard for Testing.

Length Blade, Inches	1 36	3	4 1/2	6
Length Beam, Inches	1 %	$2\frac{7}{10}$	3 %	4 %
Each	\$3.60	4.50	6.90	9.00
Fancy Wood Case, Extra	2.25	2.25	2.50	2.50
Length Blade, Inches	9	12	15	18
Length Beam, Inches	5 %	11/8	8 %	10 1/4
Each	\$13.50	18.00	30.00	34.50
Fancy Wood Case, Extra	2.75	3.00	4.00	4.50

#### MILLWRIGHTS SQUARES

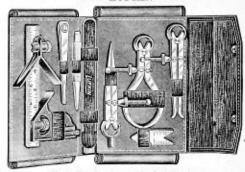
BROWN & SHARPE

Designed to meet the Requirements of a More Accurate Tool than the Ordinary Carpenters' Square Each

No. 550-Blade 24 in. Long, 2 in. Wide, Tongue 18 in, Long, 11/2 in, Wide, Weight

Each 2 Lbs..... . . . . . . . . . . . . . . . . . \$17.00 Both blades are  $\frac{d}{dt}$  in, thick at the corner where they unite, and taper down to  $\frac{1}{dt}$  in, at their ends. They have similar graduations on both sides, one inside and outside corner being graduated in 8ths and the other inside and outside corners graduated in One inside and outside corner of one side has the first inch graduated in 64ths and the second inch in 32nds and similarly on the other side.

#### MACHINISTS TOOL SETS LUFKIN



For Students and Apprentices Per Set. No. 1-8 Tools as Listed Below in Folding Leather Case 7x5x1 1/4 in., Weight Each 1 1/2 Lbs...... \$8.75

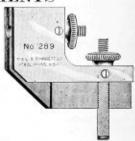
- Contents of No. 1 Set 1 No. 26C, 6 in. Combination Square
- No. 71C, Center Punch No. 611D, 6 in. Steel Rule
- 1 No. 036, Center Gauge
- 1 No. 17, 4 in. Hermaphro-
- dite. One Set in a Box.
- 1 No. 41, 4 in. Outside Spring Caliper
- 1 No. 42, 4 in. Inside Spring Caliper
- 1 No. 40, 4 in. Spring Divider

#### COMBINATION SQUARE ATTACHMENTS

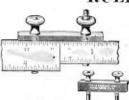
STARRETT

Fits Any Standard Rule This attachment is made to fit the 12, 18 and 24 in. blades of Nos. 11, 23 and 33 Squares. and can be used in connection with any of the regular steel rules as wide as 1 in., or with No. 21 flat steel square for laying out key seats, etc. Each

No. 289A-1 1/2 x1 3 1 in . . \$1 . 00 No. 289B-2 % x2 % in . . 1 . 25 Four in a Box.



#### RULE CLAMPS



STARRETT Blued Steel Used to clamp two steel rules

together, end to end, making one long rule. The rules may be of the same or different widths up to 11/4 in. Of special value to mechanics whose tool chest will usually not hold rules longer than 12 in. Each

No. 299-21/2 in. Long, Weight Each 2 Oz . . . \$0.60 Four in a Box.

#### KEYSEAT RULE CLAMPS STARRETT

Used with Any Steel Rule For laying out keyways,

scribing parallel lines and on circular pieces. Per Pair

No. 298—Case Hardened Steel, Accurately

Ground .... ...\$0.75



One Pair in a Box.

# MECHANICS REFERENCE TABLES



Flexible Spring Steel 634 in. Long, 114 in. Wide.

No. 9716 - One Side Contains Tap Drill Sizes for U. S. S., S.

A. E. and Pipe Threads, Also 6 in. Scale, Opposite Side Decimal Equivalents of Fractions 2 to 3 in., Weight Each 1 Oz ......

Six in a Box.

Nº 75

#### CALIPERS AND DIVIDERS

#### STARRETT

#### TOOLMAKERS SPRING DIVIDERS

No. 277-With Solid Nut

Round Steel Legs, Highly Polished, Hard-ened Fulcrum Stud, Unusually Stiff Spring that insures Rigidity of the Legs and gives Uniform Pressure

Length, Inches	2	3	4
Each	\$1.20	1.50	1.80
Length, Inches		5	6
Each		\$1.80	2.10

#### TOOL MAKERS SPRING CALIPERS

Round Steel Legs, Highly Polished, Hardened Fulcrum Stud, Unusually Stiff Spring that insures Rigidity and Prevents Side Deflection of the Legs and gives Uniform Pressure.



Length, Inches ..... No. 274—Inside . . . . Each, \$1.20 1.50 1.80 1.80 2.10 No. 275—Outside . . . . Each, 1.20 1.50 1.80 1.80 2.10 Two in a Box.

#### LUFKIN

## TOOL MAKERS SPRING DIVIDERS

No. 140-With Solid Nut

The Legs are of Round Stock, nicely tapered by swaging. The Adjustment Screw is mounted central with the legs, avoiding all torsion on Legs and Spring. These features add to the stability of the tool. The legs are finely formed. Stiff flat Bow Spring insures reliability. Parts most subject to wear are hardened.

Length, In . . . 3 4 Each ...... \$1.20 1.50 1.80 1.80 2.10

#### TOOL MAKERS SPRING CALIPERS

#### With Solid Nut

The Legs are Round Stock, nicely tapered by swaging. The Adjustment Screw is mounted central with the legs, avoiding all torsion on legs and spring. These features add to the stability of the tool. The legs are finely formed. Stiff flat Bow Spring insures reliability. Parts most subject to wear are hardened.



Length, Inches ..... 2 No. 141-Inside . . . . Each, \$1.20 1.50 1.80 1.80 2.10 No. 142—Outside . . . Each, 1.20 1.50 1.80 1.80 2.10 Two in a Box

No. 141

#### FAY PATENT SPRING DIVIDERS

Two in a Box.

No. 77-With Spring Nut

Drop Forged Steel Legs, Polished, Improved from extra stiff Spring, Heavy Body, Automatic Closing Spring Nut, Self-Adjusting. Length, Inches . . . 2 1/2 3 1.70 Each ..... \$1.40 1.40 Length, Inches.... 5 Each ..... \$1.70 8 2.40 2.10 No. 77-With Solid Nut Length, Inches . . . . 2 1/2 2 1.20 Each ..... \$1.20 1.50 8 Length, Inches.... 5 6 Each ..... \$1.50 1.95 2.25Sent with Spring Nut unless otherwise ordered.

#### STARRETT

#### FAY PATENT SPRING CALIPERS

#### With Spring Nut

Drop Forged Steel Legs. Polished, improved form extra stiff Spring, Heavy Body Automatic Closing Spring Nut, Self-Adjust-Always sent with Spring Nut unless otherwise ordered.

(Prices Each).

Length, Inches 2½ 3 4 5 6 8 No. 74—Inside \$1.40 1.40 1.50 1.50 1.80 2.10 No. 75—Outside 1.40 1.40 1.50 1.50 1.80 2.10

With Solid Nut Length, Inches...... 23½ 3 4 5 6 8 No. 74—Inside ..... \$1.20 1.20 1.35 1.35 1.65 1.95 No. 75-Outside 1.20 1.20 1.35 1.35 1.65 1.95 Two in a Box.

#### YANKEE SPRING DIVIDERS

#### No. 83-With Solid Nut

Polished Steel, Tempered, Flat Steel Bow, Light Weight.

Length, Inches Each	2 12 \$0.80	.85	.90	5 1-00
Length, Inches	6 81.05	8 1.35	1.65	1.89
Each ,	21.00	1.00	1.00	1.00

No. 83-With Spring Nut Length, Inches . . . 2½ 2 Each . . . . . . . . . \$1.00 1.05 1.10 1.15 Length, Inches . . 6 8 10 12 Each . . . . . . . . \$1.20 1.50 1.80 2.00

Sent with Solid Nut unless otherwise ordered. Three in a Box.

Nº 79

1.80

2.00

2.00

#### YANKEE SPRING CALIPERS

#### With Solid Nut

Polished Steel, Tempered Flat Steel Bow, Light Weight.

The No. 73 can be used as a Transfer Caliper as the bow is stiff, making the caliper reliable. After calipering inside of chambered cavity by springing in the legs they may be withdrawn and as they

spring back act size cali	will show pered	n. ex-	5	/
Length, Inches		3	4	77
No. 73-Inside Each,	80.80	. 85	. 90	1.00
No. 79-Outside Each,	.80	.85	.90	1.00
Length, Inches	6	s	10	12
No. 73-Inside Each.	81.05	1.20	1.65	1.80
No. 79—Outside Each,	1.05	1.20	1.65	1.80
With 8	Spring N	ut		
Length, Inches	234	3	4	5
No. 73-Inside Each,	\$1.00	1.05	1.10	1.15
No. 79-Outside Each,	1.00	1.05	1.10	1.15
Length, Inches	6	8	10	12

No. 79—Outside . . . . Each, 1.20 1.40 1.80 Sent with Solid Nuts unless otherwise ordered. Three in a Box.

1.40

No. 73—Inside . . . . Each, \$1.20

#### PARTS FOR VANKEE CALIPERS AND DIVIDERS

Each	
Screw and Ball\$0.20	Spring
Thumb Attachment20	Jam Washer
Solid Nut	Fulcrum Stud
Spring Nut	Stud
Leg	

#### CALIPERS AND DIVIDERS

#### BANNER SPRING DIVIDERS



#### No. 40-With Solid Nut

Made of Finest Quality Steel, Light in Weight, Correct in Shape, Hardened Points. Lgth, In. 21/2 3 4 5 Each ... \$0.80 .85 .90 1.00 1.05 1.35

No. 50-With Spring Nut

Lgth, In. 21/2 3 4 5 Each ...\$1.00 1.05 1.10 1.15 1.20 1.50

The spring nut is designed for quick adjustment. On release of pressure the nut slides freely over the threads of the screw but grips when pressure is applied.

Three in a Box.

#### \* BANNER SPRING CALIPERS



#### With Solid Nut

Made of Finest Quality Steel, Light in Weight, Correct in Shape, Hardened Points.

They are the type of Calipers most Spring widely used. The inside type can be used as a transfer caliper, as the legs can be sprung in and withdrawn after calipering.



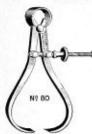
Length, Inches . . . 216 2 No. 41—Outside Each, \$0.80 .85 No. 42—Inside Each, .80 .85 .90 1.00 1.05 1.20 No. 42-Inside ... Each, .90 1.00 1.05 1.20

#### With Spring Nut

The Spring Nut is designed for making quick adjustments. On release of pressure this nut slides freely over the threads of the screw, but on slightest pressure it grips the screw firmly.

3 Length, Inches... Length, Inches...... 2½ 3 4 5 6 8 No. 51—Outside. Each, \$1.00 1.05 1.10 1.15 1.20 1.40 No. 52-Inside...Each, 1.00 1.05 1.10 1.15 1.20 1.40 Three in a Box.

#### YANKEE SPRING THREAD CALIPERS



#### No. 80-With Solid Nut

Polished Steel, Tempered Flat Steel Bow, Light in Weight.

These Calipers have wide flat points and are intended for measuring threads on bolt studs and other threaded parts.

Length, Inches... 3 4 Each ...... \$1.05 1.10 1.15

No. 80-With Spring Nut Length, Inches . . . 3 Each ..... \$1.20 1.30 1.35

Sent with Solid Nut unless otherwise ordered.

#### No. 179-With Solid Nut

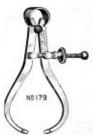
Polished Steel, Tempered Flat Steel Bow, Light in Weight.

These Calipers are designed for measuring the diameter at bottom of threads on the outside of screws.

Length, Inches... 4 5 6 Each ...... \$0.90 1.00 1.05

No. 179-With Spring Nut

Length, Inches... 4 5 Each ...... \$1.10 1.15 1.20



Sent with Solid Nut unless otherwise ordered.

Three in a Box.

#### CALIPERS

#### YANKEE SPRING INSIDE THREAD

No. 184-With Solid Nut



Polished Steel, Tempered Flat Steel Bow, Light in Weight, Hardened Finished Points.

These Calipers are designed for measuring the diameter at bottom of internal threads. For measuring inside of nuts, etc. 5 Length, Inches.... 4 Each ...... \$0.90 1.00 1.05

No. 184-With Spring Nut

Length, Inches . . . . 4 Each ...... \$1.10 1.15 1.20

Sent with Solid Nut unless otherwise ordered. Three in a Box.

#### LUFKIN FIRM JOINT

#### Polished Steel



distinctive feature of The these Firm Joint Calipers is the adjustable joint. Lock screw construction enables one to set and hold the legs to any desired tension or friction.

These Tools are of sturdy construction throughout, smooth working, nicely proportioned, and have a fine, uniform finish.

All sizes below refer to lengths of legs. Actual capacity of the Calipers is about one-quarter greater than this length.

No. 11. Length, Inches...

Length, Inches..

No. 11-Outside 3 4 15 10 Each ...... \$0.50 .60 .70 .80 1.00 1.10 1.20 14 16 18 20 24 30 36 Each ....... \$1.80 2.10 2.55 3.00 3.60 6.00 7.20

No. 12-Inside

Length, Inches... 3 4 5 10 Each ..... \$0.50 .60 . 70 .80 1.00 1.10 Length, Inches.. 12 16 24 14 18 20 Each ...... \$1.20 1.80 2.10 2.55 3.00 3.60 3 to 6 in., Six; 8 to 12 in., Three; 14 to 20 in., Two in a Box; Other Sizes, One in a Package.

#### STARRETT IMPROVED FIRM JOINT



#### Polished Steel

The Joint is tightened by means of a screw. The main stud is squared and fitted to one leg thus preventing the stud turning when adjusting the tension, insuring a smooth and uniform friction. Much superior to the comon rivet joint kind.



Length, Inches .. 3 4 5 6 Each ...... \$0.50 .60 .70 .80 1.00 1.10 1.20 18 Length, Inches... 14 16 20 24 30 36 Each ...... \$1.80 2.10 2.55 3.00 3.60 6.00 7.20

No. 27-Inside

No. 26-Outside

Length, Inches. 2 5 10 Each ..... \$0.50 .60 . 70 .80 1.00 1.10 Length, Inches. 12 14 16 18 20 24 Each . . . . . . . \$1.20 1.80 2.10 2.55 3.00 3.60

The capacity of these Calipers is about one-third greater than length.

3 to 12 in., Three; 14 to 24 in., Two in a Box; 30 and 36 in., One in a Package.

#### CALIPERS STARRETT LOCK-JOINT



#### Polished Steel

These Calipers can be instantly adjusted to their full extent, and as quickly locked firm in the joint, and yet provided with a sensitive adjustment. The im-provement consists in a socket joint made tapering, and locked or released by a partial turn of the knurled disc drawing it to-gether, A Spring Washer under the Disc maintains an easy friction in the Joint when unlocked.



No.	38-0	utside			
Length, Inches 4	5	6	8	10	12
Each \$1.10	1.15	1.20	1.50	1.80	2.10
Length, Inches	14	16	18	20	24
Each	\$2.40	2.70	3.00	3.30	4.20
No	. 39-	Inside			
Length, Inches 4	5	6	8	10	12
Each 81.10	1.15	1.20	1.50	1.80	2.10
Length, Inches	14	16	18	20	24
Each	\$2.40	2.70	3.00	3.30	4.20
4 to 12 in., Three;	14 to	24 in.,	Two in	a Box.	

#### STARRETT LOCK-JOINT TRANSFER



#### Polished Steel

These Calipers may be used inside of chambered cavities, over flanges, etc., removed and replaced without losing the size calipered.

This is done by loosening the nut binding one arm to the auxiliary leaf and swinging it out or in (while the joint is locked) to clear the obstruction, then moving it back against a stop where it will show exact size measured.



Length, Inches 4	5	6	8	10	12
Each \$1.50	1.70	1.80	2.10	2.40	2.70
Length, Inches	14	16	18	20	24
Each	\$3.00	3.30	3.60	4.20	5.50
No.	37-0	Outside			
Length, Inches 4	5	6	8	10	12
Each \$1.50	1.70	1.80	2.10	2.40	2.70
Length, Inches	14	16	18	20	24
Each	\$3.00	3.30	3.60	4.20	5.50
4 to 12 in., Three;	14 to	24 in.,	Two in	a Box.	

No. 36-Inside



#### STARRETT DOUBLE

#### No. 44-With Improved Firm Friction Joints

These Instruments Combine Dividers, Inside and Outside Calipers and can be used in a number of combinations for different classes of work.

Length,	Inches	10111	6	8
Each			\$1.50	1.80

Three in a Box.

#### BROWN & SHARPE COMBINATION



## With Spring Bow

The arms or holders are provided with split chucks to receive the auxiliary legs, which are held firmly by the simple turn of the knurled nut that closes the chuck concentrically. A pencil can be substituted for one of the legs if desired.

No	840-Complete as Illus-
No.	trated, 10 in. Long\$3.60
**	840A-With Divider
No.	840A WILL DIVIGE.
	Legs Only 2.40
	One in a Box.

#### CALIPERS

#### STARRETT FIRM-JOINT SCREW-ADJUSTING



#### Polished Steel

The screw adjustment for fine measurements. the improved joint which may be set to any desired degree of uniform tension. the shape and stiffness of the legs, quickness and wide scope of adjustment-all go to make this Caliper a leader in its line,

	No.	34-0	utside		J)	
Length, Inches	4	6	8	10	12	14
Each	\$1.10	1,20	1.50	1.80	2.10	2.40
Length, Inches	16	18	20	24	30	36
Each	\$2.70	3.00	3.30	4.20	7.20	8.40

No	. 35	Inside			
Length, Inches	4	6	8	10	12
Each	\$1.10	1.20	1.50	1.80	2.10
Length, Inches	14	16	18	20	24
Each	\$2.40	2.70	3.00	3.30	4.20
4 to 12 in., Three;	14 to	24 in.,	Two in	a Box.	

## HERMAPHRODITE CALIPERS



No. 41-Adjustable Point Improved Spring Joint with Smooth Uniform Friction.

Length, Inches ..... 4 10 Each .... \$0.80 1.00 1.20 1.45 Three in a Box.



No. 42—Adjustable Point, Lock Joint, Sensitive Adjustment Length, Inches ..... 10 6 4 \$1.10 1.20 1.50 1.80 Each . . . . . . . . . . . . . . . . Three in a Box.



No. 243-Adjustable Point, Firm Joint, Offset Leg Length, Inches 80.80 1.00 Each ...... Three in a Box.

#### LUFKIN



No. A-17-With Round Adjustable Point Length, Inches ...... 80.80 1.00 1.20 Each ...... Three in a Box.

#### LOCK LEG DIVIDERS STARRETT



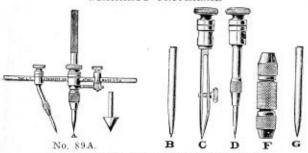
#### No. 43-Polished Steel

With improved lock-joint attachment and sensitive adjustment. It is light and rigid with large capacity, instantly opened, closed, and locked. The points are nicely tempered. 10

Length, Inches 6
S1.20 1.50 1.80 Three in a Box.

#### DIVIDERS

STARRETT UNIVERSAL



For Engineers, Architects and Draftsmen

The adjustable Scriber Holder is reversible and carries either a fine tempered Steel Point or a Pencil Lead, held in a Split Socket by a Knurled Nut. With the Holder turned outward it is possible to work close to shoulders, something that cannot be done by a similar tool of any other make; turned inward, points may be brought close together to scribe the smallest circle. With 4 in, beam a 7½ in. circle and under may be scribed. An auxiliary beam 13 in. long is furnished, with which a 25 in. circle may be drawn. The cone enter may be substituted for the regular point, adapting the tool for scribing a drilled hole. We also furnish a pen attachment.

Each

83.00
Each
\$0.35
2.15
.70
.35
. 55
.20
7.20
1.50
2.10

#### STARRETT IMPROVED EXTENSION

#### With Hardened Steel Points

A well made Divider with auxiliary legs, which together with a common pencil, form convenient combinations. By adjustment of points the 7 in, becomes 9 in., and will scribe a 22 in. circle and will caliper 11 in. outside and 13 in. inside. By adjustment of points the 9 in. becomes 12 in. and will scribe a 30 in. circle and caliper 14 in, outside and 16 in. inside.

No.	85A- 7	in.	Long.	with	Divider	Legs	Only	81.80
No.	85B- 9	in.	Long,	with	Divider	Legs	Only	2.10
No.	85C- 7	in.	Long,	Comp	lete			3.00
No.	85D- 9	in.	Long,	Comp	olete			3.30
No.	85E-12	in.	Long.	with	Divider	Legs	Only	3.00
No.	85F-12	in.	Long.	Comp	olete			4.20
			0	ne in	a Box.			

#### BALL POINTS

#### STARRETT

For Use with No. 85 Dividers or Nos, 51 and 59 Trammels

No.	88-	-Hold	er and	Four	Balls,	One		bet
	1%.	1, %	and 1	2 in.	Diamet	er		1.50
Eith	er B	all or	Holde	r			Each,	.30

When it is necessary to use a hole as center for dividers or trammels it is, of course, impossible to use an ordinary divider point. In such cases the Ball Point placed in the hole and bearing against the edges forms a seat for the divider leg in scribing circles or arcs around the hole.

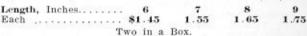
One Set in a Box.

#### DIVIDERS

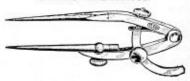
#### STARRETT LOOSE LEGS

#### No. 92-Tempered Steel Points

The quadrant passes through the leg and the clamp screw frictionally locks it firm. After in the adjustments are made, our style of lock nut, between the arms, locks the spring in the leg firm, overcoming the defect in the old style dividers of the points dodging out and in with the grain of the wood. The adjustable point may be instantly removed and a common pencil inserted in its place, or the ball points shown below may be used. The dividers are light, yet rigid and easy to handle.



#### PEXTO EXTENSION



#### No. 9—One Movable Leg

Forged Steel, Polished, Brass Joints.

Length, In-	ches	6	8
Weight Pe	r Dozen, Lbs	4 1/2	5 %
Per Dozen		\$15.00	18.00
	One-half Dozen i	in a Box.	

#### PEXTO WING



#### No. 35-Forged Steel, Polished

Oil Tempered, Brass Joint, Knurled Adjusting Screw.

Length, Inches 6	7	8	10
Weight Dozen, Lbs 4	4 1/4	4 1/6	8
Per Dozen	50 9.50	10.50	14.00
Length, Inches	12	15	18
Weight Dozen, Lbs	12	14	19 1/6
Per Dozen	\$16.00	42.00	48.00
One half 1	Dozen in a P	ov	

#### PENCIL CLASPS

#### STANLEY



For Attaching to Dividers

Nickel Plated Iron with Steel Thumb Screw.

No. 8—1¼ in. Long, Weight Per Dozen ½ Lb.....\$2.10 One Dozen on a Display Card

#### SCRIBERS

GEM NEW STYLE



#### With Adjustable Steel Point

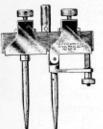
Polished Stamped Steel Frame, Steel Set Screw and Thumb Net, One Leg with Adjustable Steel Point and One to Hold Pencil,

No. 10—3½ in. Long, Weight Per Dozen 1 Lb.....\$3.00 One Dozen in a Box.



## TRAMMELS

## STARRETT IMPROVED



#### With Adjustable Points

Bronze Metal Bodies, Hardened Forged Steel Points. Either point can be removed and the pencil socket accompanying each pair put in its Adjustable like spring diplace. viders, light and durable.

No.	50A-With 3 in. Points.
	Adjustable, Weight Per
	Set 5 Oz
No.	50B-Not Adjustable,
	Otherwise Same as No.
	50A 2.25

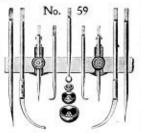
Per Set

No. 50C-Extra Long Points (5 in. Long) for No. 50B Trammels ..... One in a Box.

#### STARRETT NEW



This illustration gives a more detailed representation of the Trammel Heads.



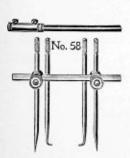
This cut shows the trammels fastened to a wooden beam, which may be any size from 34 in. to 154 in. wide, and of any thickness desired (requiring no fitting), giving stiffness according to the length and adapting it for small or large work.

No.	59A Set-Trammel Heads Only, with One Pair	
	of Points, Weight Each 9 Oz Per Set,	\$2.40
No.	59B-Balls and HolderPer Set,	1.50
No.	59C-Small Caliper Legs Per Pair,	. 60
No.	59D-Large Caliper Legs	.90
No.	59E-Large Divider Points Per Pair.	. 60
No.	59F Set-Complete as Shown, Weight Each 1 %	
	Lbs	5.75

The auxiliaries designed to go with the trammel heads are as shown above, viz., inside and outside caliper legs, an extra pair of long points, a set of four ball points with holder, which enable one to scribe a circle from the center of any hole up to 11/2 in. and under. A lead pencil may be used in place of either of the steel points. The clamping device is adapted to take in either a small or common sized pencil. The trammels are furnished with or without auxiliaries.

#### STARRETT EXTENSION STEEL BEAM

#### Plain Finish



The beam of this tool is in round, with one side flattened. It is made in one, two and three sections. of 14 in. lengths each, and coupled together by means of an improved socket coupling and grip nut, rigidly holding them for long reaches. With one 14 in, section only, it weighs but 8 oz. The slides carrying the points grip both beam and points by a partial turn of the knurled nut. Fine adjustments are made by a slight rotation of one or the other eccentric point, which by friction springs retain it when the nut is loosened.

Ea	tch
No. 58A-With One Section, 14 in	65
No. 58B-With Two Sections, 28 in	15
No. 58C-With Three Sections, 42 in 3.	60
Extra Sections	
Extra Caliper PointsPer Pair,	
One in a Box.	

#### TRAMMELS

#### STARRETT EXTENSION BEAM

#### Nickel Plated



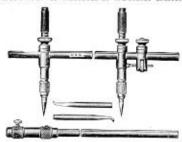
With opening through the under side to accommodate the extension giving width and stiffness in proportion to the length required for large work, while it is equally well adapted to receive a narrow beam for light work.

The points are eccentric, and may be loosened and rotated in their sockets to make fine adjustments. Points may be removed and pencil inserted.

One of the caliper legs is provided with a joint, worked by an eccentric thumb piece for fine adjustments.

										Each	
No.	51A-	-Complete	e Set		 	 740				84.35	
No.	51B-	-Without	Caliper	Legs	 					3.35	
				in a							

#### BROWN & SHARPE STEEL BEAM

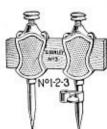


#### Complete with One Pair of Calipering Points

The trams are clamped by knurled nuts to the beam, which is flattened on top, and the thrust taken by washers to prevent marring the bearing surfaces. A spring friction holds the trams in place when the nuts are loosened for setting. One tram has an adjusting screw and slide, which is convenient for fine adjustment of the points. A swivel handle at the top of each tram is a noticeable advantage, as it enables the trammels to be much more conveniently and accurately used than is possible with fixed handles.

0.0000	Each
No.	845-With 9 in. Beam, Will Describe a Circle
	18 in, in Diameter
No.	845A-With 13 in. Beam, Will Describe a Circle
SE 300	26 in, in Diameter 6.00
No.	845B-With 13 in. Beam and Extension, Will
	Describe a Circle 54 in. in Diameter 7.00
	One in a Box.

#### STANLEY BRONZE



#### Bronze Bodies, Steel Points

With Attachment for Clamping Pencil to Either Point.

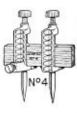
Nos	1	2	3
Width of Open., Inches	5%	1	1 1/4
Wt. Per Set, Oz Per Set	\$1.60	2.05	
One in	a Box.		

#### STANLEY IRON

#### Nickel Plated

They can be attached to one side of a straight stick. The pencil socket will take an ordinary size pencil or a full sized oval shaped carpenters pencil.

No.	4—For Straight Edge Up to 11/4
	in\$1.15
	One in a Box.



#### MACHINISTS STEEL RULES

Machinists' Ste	el Rules are	divided into	parts of i	inches as	follows:
-----------------	--------------	--------------	------------	-----------	----------

No. 1 Graduation	No. 2 Graduation	No. 4 Graduation	No. 7 Graduation
1st corner10, 20, 50, 100 2d corner12, 24, 48 3d corner16, 32, 64 4th corner14, 28	1st corner10, 20, 50, 100 2d corner12, 24, 48 3d corner16, 32, 64 4th corner8	2d corner32	1st corner
No. 10 Graduation	No. 11 G	raduation	No. 12 Graduation
1st corner			er50

#### STARRETT REGULAR SPRING TEMPERED

in Thereton	. 1	PRILATED	2700 2		E 300	**
7 1 1	100	Alad		4		

#### No. 300-With No. 4 Graduations

3 in. Thick, without End Graduations.

Length, Inches	1	2	3	4	6	9
Width, Inches	1/2	1/2	Te	5%	34	3/8
Each	\$0.30	. 45	.60	. 75	. 90	1.35
Length, Inches		12	18	24	36	48
Width, Inches		1	1 1/8	1 1/4	1 1/4	1 1/4
Each		\$1.65	2.60	3.25	7.00	10.00

No. 301-Same as above with No. 1 Graduations. No. 302—Same as above with No. 2 Graduations. No. 307-Same as above with No. 7 Graduations. Nos. 301 and 302 made 6 and 12 in. only; No. 307 made 1 to 48 in.

1 to 12 inch. 6 in a Box: Larger Sizes, 1 in a Package,



#### No. 303-With No. 4 Graduations.

is, in. Thick, with End Graduations.

2 3 4 6 Length, Inches . . . . 0 10 Width, Inches ..... 1/2 5% .60 Each ..... \$0.45 .75 .90 1.35 1.65 Six in a Box.

#### STARRETT SPRING TEMPERED



#### No. 603—With Figured Graduations.

No. 4 Graduations, of in. Thick. The 64ths are numbered every 8th Graduation Line as 8, 16, 24, etc.

nerva stery cen connen		03	W 23 W 2	, cec	
Length, Inches	1	2	3	4	6
Width, Inches	1/2	1/2	20	56	34
Each	\$0.30	. 45	. 60	. 75	. 90
Length, Inches		9	12	18	24
Width, Inches		7/8	1	1 1/4	1 1/4
Each		\$1.35	1.65	2.60	3.25

These rules are graduated on both ends of one side in 32nds as shown in cut.

1 to 12 inch, 6 in a Box; Larger Sizes, 1 in a Package.

#### STARRETT BEVELED EDGE SPRING TEMPERED



#### No. 400-With No. 4 Graduations.

6

.90

24

At in. Thick, with 64ths on Beveled Edge. Length, Inches ..... 2 2 1 4 1/2 Width, Inches ..... 1/4 .45 .60 .75 Length, Inches ...... 9.

Width, Inches ...... 36 1 1 14 1 14 \$1.35 1.65 2.60 3.25 1 to 12 inch, 6 in a Box; Larger Sizes, 1 in a Package.

12

18

#### LUFKIN REGULAR SPRING TEMPERED



No. 2204-With No. 4 Graduations.

in. Thick, with Graduations on both ends of one side in 32nds.

Length, Inches	1	2	3	4	6	9
Width, Inches	1/2	3/2	1/2	56	3/4	76
Each	\$0.30	. 45	.60	. 75	. 90	1.35
Length, Inches		12	18	24	36	48
Width, Inches		1	114	1 1/4	1 1/4	1 1/4
Each		81.65	2.60	3.25	7.00	10.00
1 to 12 inch 6 in	a Pov	Large	r Sine	o 1 in	a Dool	ro mo

in a Box; Larger Sizes, 1 in a Package. LUFKIN SPRING TEMPERED

No. 2204R-With Figured Graduations,

No. 4 Graduations, 34 in. Thick. The 64ths are numbered every 8th Graduation Line as 8, 16, 24, etc. Length, Inches . . . . . 1 2 3 4 1/2 Width, Inches ..... 1/2 14 34 Each \$0.30 .45 .60 . 75 .90 Length, Inches ...... 9 12 18 24 Width, Inches ...... 7/8 1 1 1/4 114 Each \$1.35 1.65 2.60 3.25

These rules are graduated on both ends of one side in 32nds.

1 to 12 inch, 6 in a Box; Larger Sizes, 1 in a Package. BROWN & SHARPE SPRING TEMPERED

No. 315-With Figured Graduations.

No. 4 Graduations, about 1/20 of an inch Thick. The 64ths are numbered every 8th Graduation line as 8, 16, 24. etc. Length, Inches ..... Width, Inches ..... 1/2 35 13 Each \$0.30 . 45 .60 75 .90 Length, Inches ...... 9

12 18 24 Width, Inches ..... Each \$1.35 1.65 2.60 3.25 1 to 12 inch, 6 in a Box; Larger Sizes, 1 in a Package.

LUFKIN BEVELED EDGE SPRING TEMPERED



No. 2224—With No. 4 Graduations.

These Rules are used by Tool Makers, Draftsmen, Engineers and Architects, and are very handy for laying out work, a in. Thick. Length, Inches .....

12 Thickness, Inches .... 84 74 1 80.75 .90 1.35 1.65 Six in a Box.

#### STARRETT STAINLESS STEEL



No. 1000-With No. 4 Graduations.

Will not Rust or Stain, made of Stainless Steel, Specially Heat Treated. Length, Inches . . Width, Inches ..... \$1.35 2.65 Six in a Box.

#### MACHINISTS STEEL RULES

#### STARRETT HEAVY SPRING TEMPERED

## Ates 1 serenance 5 versioner 3 المفتدا الإراج المتطعان والمتاط والمتلواء أنتنا والمتكرات كالمتاي

No. 410-With No. 4 Graduations About 1/10 inch Thick, without End Graduations.

Length, In. 12 18 24 34 48 60 72

Width, In. 1¼ 1¼ 1¼ 1½ 1½ 1½ 1½ 1½

Each ... \$1.65 2.60 3.25 7.00 10.00 20.00 24.00 12 inch, 6 in a Box; Regular Size, 1 in a Package.

#### LUFKIN HEAVY SPRING TEMPERED

	11	62/	6	T	0.0
40.1616	a lates	-	lala	71	10-11-12
	1	6 1	10	4.1	

No. 2404-With No. 4 Graduations. About 1/10 inch Thick, Machine Divided. 
 Length, Inches
 36
 48
 60
 72

 Width, Inches
 1 ½
 1 ½
 1 ½
 1 ½
 1 ½

 Weight Each, Lbs
 1 ¾
 2 ¼
 2 ¾
 3 ¼

 Each
 87.00
 10.00
 20.00
 24.00
 One in a Package.

#### STARRETT FLEXIBLE STEEL



No. 320-With No. 10 Graduations Very Thin, Graduated One Side Only. Length, Inches . . . . 1 2 Width, Inches . . . . ½ ½ 2 1/2 1/2 Width, Inches ..... .90 36 34 12 1.65

#### LUFKIN FLEXIBLE STEEL



No. 2110-With No. 10 Graduations Very Thin and Flexible; Graduated One Side Only. 
 Very Trin and Flexible;
 Graduated One Side Only.

 Length, Inches
 1
 2
 3
 4
 6
 9

 Width, Inches
 ½
 ½
 ½
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 1 to 12 inch, 6 in a Box; Larger Sizes, 1 in a Package.

#### BROWN & SHARPE FLEXIBLE STEEL



No. 306-With No. 10 Graduations Very Thin, About .017 inch Thick; Graduated One Side Only. Only. Length, Inches . . 4 1 to 12 inch, 6 in a Box, Larger Sizes, 1 in a Package. LUFKIN SEMI-FLEXIBLE

No. 2604R-With Figured Graduations No. 4 Graduations, 1/50 in. Thick. The 64ths are numbered every 8th Graduation Line as 8, 16, 24, etc. Length, Inches . . . . 2 3 4 6 9 Width, Inches . . . . ½ ½ 5% ¾ % 1 Each ...... \$0.45 .60 .75 .90 1.35 1.65 These Rules are graduated on both ends of one side in Six in a Box.

#### STARRETT NARROW

#### Control State Stat

No. 330-With No. 10 Graduations Graduated on One Edge of Each Side; & in. Wide and 1/25 in. Thick. 

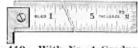
 Length, Inches
 4
 6
 9
 12

 Each
 80.75
 90
 1.35
 1.65

 No. 331, Same as Above with No. 11 Graduations.

 LUFKIN NARROW SPRING TEMPERED

No. 2310-With No. 10 Graduations Graduated on One Edge of Each Side; a in. Wide and About 1/20 in. Thick. 1.35 1.65 No. 2311-With No. 11 Graduations 6 12 .90 1.35 1.65 Six in a Box. STARRETT HOOK



No. 419-With No. 4 Graduations Hardened Steel Hook. The Hook may be Removed by Turning Eccentric Stud. For taking measurements from points where one cannot

see if rule is even with measuring edge. 6 to 12 inch, 3 in a Box; Larger Sizes, 1 in a Package.

# STARRETT ADJUSTABLE HOOK



No. 418-With No. 4 Graduations Can be Adjusted Short or Long, with Any of the Four Graduations, Hooks are Hardened and are Removable. 
 Length, Inches
 6
 9
 12
 18
 24

 Each
 81.25
 1.75
 2.15
 3.10
 3.75
 6 to 12 inch, 3 in a Box; Larger Sizes, 1 in a Package.



No. H2204-With No. 4 Graduations Hardened Steel Removable Hook. For Measuring Over Round and Square Corners, Hubs of Pulleys, etc. Length, Inches. 6 9 12 18 24 Width, Inches. ¾ 7/8 1 11/4 11/4 36

Width, Inches. 34 % 1 14 14 14 Each ...... \$1.25 1.75 2.15 3.10 3.75 7.65 6 to 12 inch, 3 in a Box; Larger Sizes, 1 in a Package. BROWN & SHARPE HOOK



No. 320-With No. 4 Graduations Hardened Steel Removable Hook, for Measuring Over Corners, etc. 

4 to 12 inch, 6 in a Box; Larger Sizes, 1 in a Package. STARRETT NARROW HOOK

Three in a Box.

No. 422-With No. 10 Graduations Hardened Steel Hook, Removed by Turning Eccentric Stud, a in. Wide. 2.00

1

### MACHINISTS STEEL RULES

LUFKIN NARROW HOOK

No. H2310—With No. 10 Graduations Hardened Steel Removable Hook, with Eccentric Stud.

#### BROWN & SHARPE NARROW HOOK

COLUMN TO THE TAXABLE TO THE TAXABLE

#### STARRETT KEY-SEAT



	With Hardened Steel Clamps	Each
No.	105A-6 in. Long, without Straight Edge	\$2.70
No.	105B-6 in. Long, with Plain Auxiliary Straight	
	Edge	3.30
No.	105C-6 in. Long, with Graduated Auxiliary	
	Straight Edge	3.60
No.	105D-9 in. Long, without Auxiliary Straight	
	Edge	3.60
No.	105E-9 in. Long, with Auxiliary Straight Edge,	
	Plain	
No.	105F-9 in. Long, with Auxiliary Straight Edge,	
	Graduated	5.10

This Key-Seat Rule is an improvement over the ordinary type in that the Machinists' Scale is used as part of the Key-Seat Rule. This is made possible by a device which holds two straight edges together in the form of a box square. One of these rules is a plain straight edge and the other the rule with which the machinists ordinarily works. The two edges forming the box square when applied to the surface of the cylindrical piece keep the graduated edge of the rule in a line parallel with the axis.

One in a Box.

#### BROWN & SHARPE KEY-SEAT

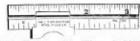
## The Carry Agents of the sales

#### No. 374-Hardened Steel

Parallel lines for key seats, mortises, etc., can be readily and accurately drawn with these rules on shafts not less than % in. diameter.

The edges are beveled, and graduated to 32nds of an

#### STARRETT THUMB SLIDE



#### With Removable Thumb Slide

Useful in Measuring Against a Shoulder, the Width of Flanges, Collars, etc. Each No. 290—6 in. Long. % in. Wide, % in. Thick, with No. 4 Graduations. \$2.00 No. 297—With No. 7 Graduations. 2.00 Three in a Box.

#### BROWN & SHARPE THUMB SLIDE



With Removable Thumb Slide

#### MACHINISTS STEEL RULES

BROWN & SHARPE CALIPER



		No.	39)	1-	-	W	uti	h	1	V.C	١.	. 3		Graduations	
	An	Ecce	ntri	c	N	ut		Lα	oc	k	8	t	he	Rule when Set.	
Length,	In	ches												3	4
Caliper,	In	ches												2 1/4	3 14
Each .														85.00	5.50
													ox		

#### BROWN & SHARPE SLIDE CALIPER



#### STEEL STRAIGHT EDGES

BROWN & SHARPE



No. 527—Hardened Edges Length, Inches.  $3\frac{7}{8}$   $5\frac{1}{2}$  7  $10\frac{3}{4}$   $13\frac{3}{4}$  17 20Width, Inches.  $\frac{1}{16}$   $1\frac{1}{8}$   $1\frac{3}{8}$   $1\frac{3}{4}$   $2\frac{1}{16}$   $2\frac{7}{16}$   $2\frac{7}{8}$ Thickness, In. .  $\frac{1}{16}$   $\frac{3}{64}$   $\frac{3$ 

#### STARRETT



No. 380-Plain Edge Hardened Steel, For Precision Work. Length, Inches ..... 12 18 24 266 Width, Inches ..... 1 1 34 1 1/2 2 Thickness, Inches.... Ya. Each ..... \$1.50 2.40 3.30 6.00 72 48 60 2 1/2 3 2 14 14 14.40 19.20 One in a Package.

#### STARRETT



No. 385—Beveled Edge

For Testing Surfaces for Precision and for use in Work of Sighting and Winding. 
 Length, Inches
 12

 Width, Inches
 1

 Thickness, Inches
 1
 26 1 1/2 2 Each ..... \$2.00 3.25 7.20 4.50 48 72 60  $2\ 1_2$ 3 3 Thickness, Inches ...... 14 18.00 24.00

Where lines are to be scribed straight or when surfaces must be tested for their precision, an accurate standard straight edge is generally used. Straight edges are also necessary on some kinds of work for use in sighting for winding. It is needless to say that such straight edges must be absolutely dependable. We have made a line of straight edges which for accuracy cannot be excelled. The various sizes have been selected as being most convenient. The sizes given are approximate.

For Graduations of Steel Rules, See Page 80.

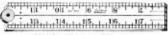
#### RULES

ONE FOOT, FOUR FOLD



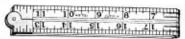
Per Dozen No. 475-(65) % in. Wide. Square Joint, Middle Plates, Marked 8ths and 16ths of Inches, Weight Per Dozen One-half Dozen in a Box.

#### TWO FOOT, FOUR FOLD



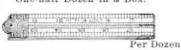
With Heavy Figures Per Dozen

No. 651-(68A) 1 in. Wide, Round Joints, Middle Plates, Marked 8ths and 16ths of Inches, Weight Per Dozen One Dozen in a Box.



With Heavy Figures

Per Dozen No. 751-(61) 1 in. Wide, Square Joint, Middle Plates, Marked 8ths and 16ths of Inches, Weight Per Dozen 1 1/2 Lbs. \$4.20 One-half Dozen in a Box.



No. 760-(63 1/2) 3/4 in. Wide. Square Joint, Edge Plates, Marked 8ths, 10ths and 16ths of Inches, Weight Per One Dozen in a Box.



#### Half Brass Bound

Per Dozen No. 771-(84) 1 in. Wide, Square Joint, Half Bound, Marked 8ths, 10ths, 12ths and 16ths of Inches, with Drafting Scale, Weight Per Dozen 2 Lbs. .....\$9.00 One-half Dozen in a Box.



#### Brass Bound

Per Dozen No. 781—(62) 1 in, Wide, Square Joint, Full Bound, Marked 8ths, 10ths, 12ths and 16ths Inches. with Drafting Scale,, Weight Per Dozen

8ths, 10ths, 12ths and 16ths of Inches, Weight Per Dozen 2 Lbs. . . . . . . . . . . . 11.40 One-half Dozen in a Box.

#### RULES

TWO FOOT, FOUR FOLD



Wide Brass Bound

Per Dozen

No. 782—(72½) 1¼ in. Wide, Square Joint, Full Bound, Marked 8ths, 10ths and 16ths of Inches, Weight Per Dozen One Dozen in a Box.

#### ARCHITECTS TWO FOOT, FOUR FOLD



Beveled Faces Per Dozen No. 861A—(53½) 1 in. Wide, Arch Joint, Edge Plates, Marked 8ths, 10ths, 12ths and 16ths of Inches, with Drafting Scale, Weight Per Dozen 1 1/2 Lbs... ... \$12.00 One-half Dozen in a Box.

#### BLINDMANS TWO FOOT, FOUR FOLD



Extra Large Figures

Per Dozen No. 762B-(7) 1 % in. Wide. Square Joint, Edge Plates, Weight Per Dozen 2 Lbs. \$12.00 These Rules are marked with large and distinct figures and are especially adapted for use in poorly lighted places, or by persons with poor eyesight. One-half Dozen in a Box.

#### THREE FOOT, FOUR FOLD



Per Dozen No. 3851-(66 1/2) 1 in. Wide, One-half Dozen in a Box.



Brass Bound Per Dozen

No. 3881-(66%) 1 in. Wide, Arch Joint, Full Bound, Marked 8ths and 16ths of Inches, Weight Per Dozen 3 1/4 Lbs. One-half Dozen in a Box.

#### FOUR FOOT, FOUR FOLD



Brass Bound Per Dozen No. 4883-(94) 1 1/2 in. Wide. Arch Joint, Full Bound, Marked 8ths and 16ths of One-half Dozen in a Box.

#### RULES

TWO FOOT, TWO FOLD



No. 702—(18) 1% in. Wide, Square Joint, Marked 8ths and 16ths, Weight Per Dozen 

## CALIPER, SIX INCH, TWO FOLD



No. 171—(36) % in. Wide, Square Joint, Marked 8ths, 10ths, 12ths and 16ths of Inches, Left Hand Caliper Graduated in 16ths, Weight 

#### CALIPER, ONE FOOT, FOUR FOLD



No. 386-(32) 1 in. Wide, Arch Joint, Edge Plates, Marked 8ths, 10ths, 12ths and 16ths of Inches, Left Hand Caliper Graduated in 16ths, Weight Per Dozen 114 Lbs. . . . . \$10.80

No. 388-(32 1/2) Full Bound. 16.20

#### CALIPER, ONE FOOT, TWO FOLD



No. 372-(36 1/2) 1 1/4 in. Wide. Square Joint, Marked 8ths. 10ths, 12ths and 16ths of Inches, Left Hand Caliper Graduated in 16ths, Weight Per Dozen 1 % Lbs..... \$10.20

#### CALIPER, TWO FOOT, FOUR FOLD



Brass Bound Per Dozen No. 781C-(62C) 1 in. Wide, Square Joint, Marked 8ths. 10ths, 12ths and 16ths of Inches, Caliper 16ths and 32nds inch, Weight Per Dozen 2 34 Lbs.... ... \$21.00 All Above, One-half Dozen in a Box.

#### COMBINATION TWO FOOT, FOUR FOLD



Rule, Level and Protractor

Each No. 863L-11/2 in. Wide, Boxwood, Brass Trimmings. Edge Plates, Marked One Side Inches and 8ths, Other Side Inches and 16ths, with One in a Box.

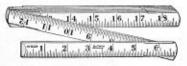
#### ZIG ZAG RULES STANLEY



Concealed Joint, % Wide, Flexible Hardwood, in. Marked 16ths of inches, Brass Plated Steel Joints and Tips, Patent Direction Arrows, Patent Strike Plates, 6 in. Folds.

Ye	llow E	namele	1		
Nos	03	04	05	06	08
Length, Feet	3	4	5	6	8
Weight Dozen, Lbs	1 1/2	2	2 34	3 1/4	4 1/4
Per Dozen	\$4.20	5.40	6.60	8.40	10.80
W	hite En	ameled			
Nos	103	104	105	106	108
Length, Feet	3	4	5	6	8
Weight Dozen, Lbs	1 1/2	2	2 34	3 1/4	4 1/4
Per Dozen	\$4.80	6.00	7.20	9.00	11.40
	alf Doze				

#### LUFKIN RIVET JOINTS



Spring Joint, % in. Wide, Flexible Hardwood, Marked 16ths of inches, Brass Plated Joints and Tips, 6 in. Folds.

	TIOW E				
Nos	8523	8524	8525	8526	8528
Length, Feet	3	4	5	6	8
Weight Dozen, Lbs	1 1/2	2	2 1/2	3	4
Per Dozen	\$3.60	4.80	6.00	7.20	9.60
	hite Er				12 2 2 2 2 2
Nos	8623	8624	8625	8626	8628
Longth Foot	- 2	4	5	6	8
Weight Dozen, Lbs	1 1/6	2	2 1/2	3	4
Per Dozen	84.20	5.40	6.60	7.80	10.20
3 ft., One Dozen; Othe	r Lengt	hs, One	-half D	ozen in	a Box.

#### VICTOR NARROW



Concealed Joint, 75 in. Wide, Flexible Hardwood Marked 16ths of inches, Steel Joints and Tips, 4 in. Fold. \*\* \*\* \*\* 1.1

Yellow Enameled	
Nos 343	344
Length, Feet 3	4
Weight Per Dozen, Lbs 11/4	1 1/2
Per Dozen	5.40
White Enameled	
Nos 643	644
Length, Feet 3	4
Weight Per Dozen, Lbs 11/4	1 1/2
Per Dozen \$4.80	6.00
One Dozen in a Box.	

#### STANLEY HOOK



With Direction Arrows and Strike Plate Concealed Joints, 5% in. Wide, Flexible Hardwood, Marked 16ths of inches, Brass Plated Joints and Tips, 6 in. Folds. Yellow Enameled

Nos	H05 H06
Length, Feet	5 6
Weight Per Dozen, Lbs	3 3 1/2
Per Dozen 8	7.20 9.00
White Enameled	
Nos	105 H106
Length, Feet	5 6
Per Dozen \$	7.80 9.60
One-half Dozen in a	Box.

## ZIG ZAG RULES

LUFKIN HOOK



#### Without Strike Plates

Riveted Joint, % in Wide, Flexible Hardwood, Brass Plated Trimmings, Marked Consecutive inches on Both Sides.

Yellow	Enameled		
Nos	H8524	H8525	H8526
Length, Feet	2	2 1/2	3
Weight Per Dozen, Lbs	2	2 1/2	3
Per Dozen	\$5.40	6.60	7.80
White	Enameled		
Nos	H8624	H8625	H8626
Length, Feet	4	5	6
Weight Per Dozen, Lbs	2	2 1/2	3
Per Dozen	\$6.00	7.20	8.40
One-half l	Dozen in a E	ox.	

#### MASTER SLIDE RULES "INTERLOX" DIRECT READING

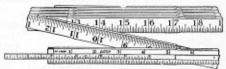


#### For Inside and Outside Measurements

Selected Boxwood, Finely Finished, 1/2 in. Wide, Solid Brass Trimmings, Concealed Springs which hold Rule Rigid when Extended, Length of Joints 8 in., Side used for Inside Measurements Marked "Inside" and Graduated for Inside Measuring. Reverse Side used like Ordinary Rule Marked "Outside" and Graduated in 8ths and 16ths inches. When Closed All Joints are Locked Together with Interlocking Device Except First Joint, which when Pulled Out, Releases Second and so on.

Nos	3MS	4MS	5MS	6MS	SMS
Length, Feet	3	4	5	6	8
No. Joints	6	8	10	12	16
Weight Dozen, Lbs.	2 1/2	3	3 1/2	4	5
Per Dozen	87.20	9.60	12.00	14.40	19.20
One	-half De	ozen in	a Box.		

#### EXTENSION RULES LUFKIN SPRING JOINT



#### With Slide Extending 6 inches

Particularly Adapted for Taking Inside Measurements. Genuine Boxwood, Extra Heavy, Securely Fastened at Joints, Graduated Both Sides in Consecutive Inches and 16ths, Clear and Distinct Figures and Lines. Per Dozen No. X8536-6 ft. Long, Weight Dozen 41/4 Lbs...\$14.40 One-half Dozen in a Box.

# STANLEY Nº204

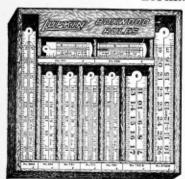
Yellow Enameled

Concealed Joints, Yellow, 6 in. Fold, % in. Wide, Marked 16ths of inches. The Extension Slide makes it an Inside Caliper.

Nos	204 206
Length, Feet	4 6
Weight Per Dozen, Lbs	3 4
Per Dozen \$8	3.40 12.00

#### RULE DISPLAY TRAYS

LUFKIN



#### Standard Boxwood Rules

The smallest well assorted stock dealer can carry.

Keeps the stock in good order and effectively displayed in small space.

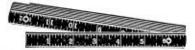
Put up in handsome oak display tray which will set flat or at any angle in showcase or window.

Each

No. 8 Assortment-Contains 2 1/4 Dozen Popular Box-

#### ALUMINUM RULES

STANLEY



Rivet Joint, 6 in. Folds, ½ in. Wide

Graduated 16ths inches on Both Sides, Black Finish, Raised White Figures and Graduations.

Nos. . . . 425 426 Length, Feet ..... 4 5 6 5 1/3 Weight Each, Oz ..... 8 20.40 24.00

The Aluminum Rule occupies a position between folding wood and steel rules, both as regards weight and durability. It is especially popular in the building trades, and in mills, shops, etc., where folding wood rules are often broken.

One-half Dozen in a Box.



Aluminum Finish, Black Figures and Sunken Graduations Rivet Joints, 16 in. Wide, Hardened Aluminum, Marked 16ths of inches, Brass Joints, 6 in. Folds, Rust-proof throughout.

Nos. . . . . . . . . . . . . . . . . 1204 1206 Length, Feet..... 6 4 5 3 % 2 3/4 Wt. Dozen, Lbs... 2 4 Dozen ..... \$12.60 16.80 21.00 25.20

These rules are made of special hardness to give the rule flexibility and to hold its shape, light weight and durable. One-half Dozen in a Box.

#### LUFKIN HOOK



Aluminum Finish, Black Figures and Sunken Graduations Solid Brass Rivet Joint,  $\frac{\sigma}{16}$  in. Wide, Hardened Aluminum, Marked 16ths inches on Both Sides, 6 in. Folds, Rust-

proof throughout. Nos. ..... H1204 H1205 H1206 Length, Feet ..... 5 6 4 4 Weight Dozen, Lbs... 3 3 34 26.40 Per Dozen . . . . . . . . . . \$18.00 22.20

A small substantial steel hook is fitted to one end, so attached that it readily folds up and remains flush with edge of rule. Zero point falls at inside of hook when open, at extreme end of rule, same as other rules, when hook is closed.

One-half Dozen in a Box.

#### RULE DISPLAY CASES LUFKIN



#### A Popular Display Case of Spring Joint Rules

Case made of quarter sawed oak, beautifully finished, and fitted with heavy glass front which can be quickly opened when making a sale.

Length of each rule is shown directly over the rule on celluloid strip, and only the most popular lengths of yellow

and white rules are included. Space is provided to insert retail price of each rule.

Per Assortment

No. 4 Assortment-Consists of 39 Rules, Four Styles of Most Popular Sellers, Put up in a 15 % x11 % in. Handsome Quarter Sawed Oak Display Case, with Glass Front, Weight Assortment 21 Lbs. . \$27.00

Contents of Display Case

		Contents of	Display Case
Nos.		Enamel	Nos. Enamel
4 - 8524	4	feet, Yellow	4-8614, 5 feet, White
6 - 8525.	5	feet, Yellow	6-8615, 5 feat, White
6 - 8526,	6	feet, Yellow	6-8616, 6 feet, White
6 - 524	4	feet, Yellow	1-X8536, 6 feet, Boxwood
			Extension.

#### FOLDING STEEL RULES LUFKIN



With Patent Stop Joints

Made of Tempered Steel, % in. Wide. Surface of Rule is Bright with Sunken Figures and Lines which Show up Clear and Distinct. Convenient, Compact and Practically Indestructible. Marked both sides 16ths inches.

1172 1173 1174 1175 1176 Nos. . . . . Length, Feet ... 6 8 2 3 4 5 Wt. Dozen, Lbs. . 1 34 2 1/2 3 % 5 6 1/2 8 Each ...... \$1.30 1.95 2.60 3.25 3.90 5.40

Nos. 1172 and 1173, Twelve; Nos. 1173 to 1178, Six in a Box.

#### LUFKIN FLEXIBLE POCKET



Nubian Finish, with Stop Joints

High Grade Popular Rules, of Flexible Spring Steel. Stop Joints hold the Sections True when Open. Over the "Nubian" (black) Finish Background, the Raised Figures and Markings, which are in the Natural Steel Color, Show up Clearly. Rules Furnished with or without Metal Bound Leather Cases. Marked inches and 16ths, both sides.

1143	*4642
3	2
3/8	1/2
4	6
16	16
1.65	1.40
.10	. 15
	3 3% 4 16 1.65

\*No. 4642 is furnished with Sunken Figures. Twelve in a Box.

LUFKIN HANDY



Per Dozen No. 041-1 ft. Long. % in. Wide, 28 Gauge Finest Quality Spring Steel, Graduated Inches and 16ths, Put up in a Metal Bound Leather Case, Weight Dozen 1/2 Lb. . \$2.40

Will bend to a 3 in. circle. Very neat and compact.

One Dozen in a Display Carton.

#### SHRINKAGE RULES

STANLEY



#### For Pattern Makers

Boxwood Brass Tips, Marked 8ths, 10ths, 12ths and 16ths of Inches, 11/2 in. Wide.

Nos	30 14 C	30 1/2 E	30 16 F	30 ½ G
Length, Inches		24 14	2436	24 1/2
Shrinkage Per Ft., In.	1/10	1/8	3/16	1/4
Per Dozen	\$19.80	19.80	19.80	19.80

Weight Per Dozen 2 Pounds, One-half Dozen in a Box.

#### BROWN & SHARPE



#### Spring Tempered Steel

Graduated in 8ths, 16ths, 32nds and 64ths Inches.

Nos		340A	341	341A
Length, Inches	121/10	24 1/6	121/8	24 14
Shrinkage Per Ft., In.	1/10	1/10	1/8	1/8
Weight Each, Oz	2	5	2	5
Each	\$2.10	4.25	2.10	4.25
Nos	342	342A	343	343A
Length, Inches	12 %	2436	12 14	24 1/4
Shrinkage Per Ft., In.	38	37	1/4	14
Weight Each, Oz	2	5	2	5
Each	\$2.10	4.25	2.10	4.25
	Six in a I	Box.		

#### LUFKIN STEEL



#### Machine Divided

Graduated in 8ths, 16ths, 32nds and 64ths Inches. For Pattern Makers, Foundry Workers, and Others. Made of Spring Tempered Steel, Approximately gr in. Thick. These Rules are the Highest Grade, Finely Graduated and Guaranteed Accurate. Lines and Figures are Cut Into Steel and Show Up Clear and Distinct.

Nos	820.6	89C.19	69C-94	OOT O	09E-10	69F 04
Length, Inches.						
Shrink. Foot, In.						
Each						
Nos	83F-6	83F-12	83F-24	83G-6	83G-12	83G-24
Length, Inches.	6	12	2.4	6	12	24
Shrink. Foot, In.						14
Each	\$1.00	2.10	4.25	1.00	2.10	4.25
Nos	3H-6 8	83H-12	83H-24	83K-6	83K-12	83K-24
Length, Inches.	6	12	24	6	12	24
Shrink. Foot, In.	16	A.	The state of	3/8	3/8	34
Each						4.25
Nos	82R-6	83R-12	83R-24	83T-6	83T-12	83T-24
Length, Inches.	6	12	24	6	12	24
Shrink, Foot, In.	46	A.	$\gamma \tilde{D}_{00}$	2.	3 <sup>8</sup> 2	A.
Each	\$1.00	2.10	4.25	1.00	2.10	4.25

## BLACKSMITHS RULES



#### Folding Steel

Spring Tempered Steel, Graduated First Two Inches in 32nds. Remainder in 16ths on One Side and 8ths Inches on the Other. Lock Joint. Each

No.	460-2	ft,	Long,	%	in.	Wide	, 2	Fold	\$1.25
		I	olding	Br	ass	with	St	op Joint	Each
No.	<b>462</b> —2	ft.	Long,			Wid a B		Fold	\$1 . 50

#### YARD STICKS

STANLEY



#### With Brass Tips

Per Dozen

No. 41-Maple, 1 in. Wide, Marked 8ths of Inches 

Weight Per Dozen 2 1/4 Lbs...... 8.40 One Dozen in a Package.

#### WANTAGE RODS



#### Polished Maple

For Finding the Quantity Wanting in Barrels of Standard Sizes when Partly Filled. Per Dozan No. 44-Weight Per Dozen 3 Lbs.... Open Stock.

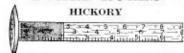
#### GAUGING RODS



#### Polished Maple, Brass Tip

For Finding the Capacity of Barrels or Casks Holding up to 120 Gallons. Per Dozen No. 45-3 ft. Long, Weight Per Dozen 3 Lbs.....\$9.00 Open Stock.

#### BOARD RULES



Oval Head, Burnt Figures

Tempered Steel Head Brazed to Heavy Brass Shoulder, Three Tier, 3 ft. Long, Figured 30 inches.

Per Dozen No. 2N-1 in. Wide, Measures Boards 8, 10, 12, 14, 16 and 18 ft. ..... .....831.20 Open Stock.

#### LOG RULES HICKORY



Square Head, Burnt Figures, Doyle Scale

Tempered Steel Head Brazed to Heavy Brass Shoulder, 31/2 ft. Long, Figured 36 inches. No. 15-Measures Logs 8, 10, 12, 14, 16, 18 and 20 ft. ..... Open Stock,

## LUMBER GAUGES



#### Brass, Nickel Plated

A Substantial Gauge for measuring Thickness of Lumber. Per Dozen

No. 00—Measuring 38, 14, 58, 34, 78, 1, 114, 112, 134 and 2 in. Thick-

One in a Box.

#### LUFKIN MEASURING TAPES

INSTANTANEOUS READING

This Illustration shows the Improved System of Marking All Lufkin Steel Tapes. Briefly described, it consists of repeating the Foot Mark at each inch in small, yet easily distinguishable figures. Thus the total reading is brought directly before the eye, eliminating all chance for a possible error.

#### Nubian Finish.

Nubian Finish designates the style of finish supplied on all Lufkin Etched Steel Tapes. The ribbon is given a dead black finish and the graduations and figures appear in the bright natural finish, producing a marked contrast which greatly increases the legibility of the tape. Nubian finish wears well, is rust resisting and improves the appearance of the tape.

#### RELIABLE STEEL

#### With Instantaneous Readings.



Metal Lined Cordovan-Brown Genuine Leather Case, Closely Hand Stitched, Metal Liners Heavily Brass Plated to Prevent Rust or Corrosion, Double Folding Flush Handle opened by pressing on opposite side. Handle has Extension Finger Hold which affords a firm grip when winding Tape. Nickel Plated Trimmings.

% inch Nubian Finished Steel Tape.

Englishment and

Marked Feet,	Inches and	8ths of	Inches One	Side	Only.

Nos	200	203	205	206
Length, Feet	25	5.0	7.5	100
Weight Each, Oz	9	13	18	21
Each	\$5.45	8.60	12.50	15.00

#### RELIABLE JUNIOR STEEL With Instantaneous Readings.



Marked	Feet,	Inches	and	16ths of	Inches	One Side	Only.
Nos				. 100	103	105	106
Length.	Feet			. 25	50	7.5	100
Weight	Each.	Oz		. 5	7	10	12
Each				. \$5.10	7.70	11.10	13.40



#### CHALLENGE STEEL

#### With Instantaneous Readings

Metal Lined Finest Grade Russet Leather Case, Folding Flush Handle opened by pressing Pin on opposite side, Nickel Plated Trimmings.

% in. Nubian Finished Steel Tape.

Marked Feet,	Inches	and	8ths of	Inches	One Side	Only.
Nos			. 260	263	265	266
Length, Feet .				.50	7.5	100
Weight Each,	Oz		. 8	12	17	21
Each			. \$4.5	0.6	0 7.80	10.20

Marked Feet, 10ths and 100ths of Feet One Side Only. 263D 265D Nos. 260D 266D Length, Feet ...... 25 50 7.5 100 \$4.90 6.00 7.80 10.20 

#### CHALLENGE JUNIOR STEEL With Instantaneous Readings.

Metal Lined Hard Leather Case, Folding Flush Handle opened by pressing Pin on opposite side, Nickel Plated Trimmings.

14 in. Nubian Finished Steel Tape. Marked Feet, Inches and 8ths on

One Side Only.				0.00
Nos	1260	1263	1265	1266
Length, Feet	25	5.0	75	100
Weight Each, Oz	4	6	9	12
Each	\$4.70	5.70	7.50	9.60

All Above, One in a Box.



#### RIVAL STEEL

#### With Instantaneous Readings.

Nickel Plated Steel Case with Knurled Edges, Folding Flush Handle, opened by pressing Pin on opposite side.

% in. Nubian Finish Steel Tane.

#### Marked Feet, Inches and 8ths of Inches, One Side Only. Nos. 240 243 245 246 25 50 7.5 100

Length, Feet ...... 11 16 Weight Each, Oz..... 8 19 84.45 5.40 7.20 9.25 Each .....

#### STAINLESS STEEL

#### With Instantaneous Readings.

Metal Lined Hard Leather Hand Stitched Case, Folding Flush Handle, opened by pressing Pin on opposite side. Nickel Plated Trimmings.

3% in. Nubian Finished Steel Tape.

Rust Proof, Non-Corrosive.



#### Marked Feet, Inches and 8ths of Inches One Side Only. S-260 S-263 8.265 8-266 25 5.0 100 75

Length, Feet ...... Weight Each, Oz ..... 12 17 21 Each ............. \$6.65 10.00 13.75 18.35

#### BANNER STEEL

#### With Instantaneous Readings.

Steel Case, Covered with Hand-some Mottled Black "Auto" Leather, Folding Flush Handle opened by pressing Side, Nickel Plated Trimmings.

3/8 in. Nubian Finished Steel Tape.

#### Marked Feet, Inches and 8ths of Inches One Side Only.

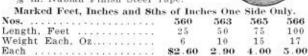
Nos	. 550	553	555	556
Length, Feet	2.5	5.0	7.5	100
Weight Each, Oz	7	11	1.7	19
Each	84.20	5.25	6.85	8.75

#### UNIVERSAL STEEL

#### With Instantaneous Readings.

Metaline, Mottled, Tan Colored Imitation Leather Case, Folding Flush Handle is opened by press-ing Pin on opposite side. Case Edge-band and all Trimmings are Nickel Plated. Measurements Graduated Accurate.

34 in. Nubian Finish Steel Tape.



All Above, One in a Box.



#### LUFKIN MEASURING TAPES

#### METAL FRAME STEEL



#### With Instantaneous Readings

Nickel Plated Steel Frame, Polished Hardwood Handle. Folding Winding Handle.

36 in. Nubian Finished Steel Tape.

#### Marked Feet, Inches and 8ths of Inches, One Side Only

Nos	283	285	286
Length, Feet		75	100
Weight Each, Oz	18	23	27
Each ,		9.85	12.25

These are favorite tapes in the oil fields and many places in general work. Frames take care of reasonable amount of dirt accumulation and afford the line a chance to dry. They also give extra winding leverage and a firm hold.

#### METALLIC



With Patent Threader

Hard Leather Case, Folding Handle, Nickel Plated Trim-

The Patent Threader is a device making the removal of an old and attaching of a new line most simple. % in, Best Woven Linen Tape with Metallic Warp.

#### Marked Feet and Inches One Side Only

Nos,	500	503	505	506
Length, Feet		50	75	100
Weight Each, Oz		13	21	24
Each	\$3.10	4.50	5.60	7.00

#### JUNIOR METALLIC

#### With Patent Threader



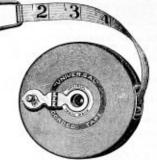
Hard Leather Case, Double Folding Flush Handle Opened by Pressing Pin on Opposite Side, Nickel Plated Trimmings.

% in Best Woven Linen Tape with Metallic Warp.

#### Marked Feet, Inches and 8ths of Inches One Side Only

Nos																				660	663
Length.	Feet	0	•	•											0				0	2.5	50
Weight																					6
Each		,	,									,								\$3.25	4.10
			9	A	11	A	b	0	ve	е.	o	n	e	iı	1	1	1	1	30	ox.	1

UNIVERSAL CORDED



#### Extra Grade

Metal Lined Hard Leather Case, Hand Stitched, Heavy Brass Folding Handles, Brass Trimmings.

% in. Coated Linen Corded Tape.

#### Marked Feet and Inches, One Side Only

Nos	940	943	945	946
Length, Feet	25	50	75	100
Weight Dozen, Lbs.	5 34	6 34	9 1/4	11
Per Dozen	\$27.00	36.00	40.80	45.00

One-half Dozen in a Box.

#### UNIVERSAL COTTON

#### Brass Bound Ass Skin Case

Cream Enameled Sides, Brass, Folding Handle, Brass Ring and Trimmings, ½ in. Cotton Tape Water-proof Coated.



Nos	710	713	715	716
Length, Feet	25	50	75	100
Weight Dozen, Lbs	2 %	4	5 %	7
Per Dozen	\$6.60	9.00	13.20	16.20

One-half Dozen in a Box.

#### STEEL POCKET



#### Nubian Finish

Round Edge Nickel Plated Brass Case, Spring Wind Center Stop, ¼ in. Nubian Finished Steel Tape Marked Inches and 16ths on One Side Only.

Nos	143	145	146	148
Length, Feet		5	6	8
Weight Dozen, Lbs	1	1	1 14	11/4
Per Dozen	\$9.00	11.40	12.00	18.00
One	half Dog	en in a Re	ov.	

#### LINEN POCKET

#### Round Edge Nickel Plated Brass Case

Spring Wind, 1/4 in. Enameled Linen Tape, Marked Inches and 8ths on One Side Only.

Nos	173	175	176	
Length, Feet	3	5	6	
Wt. Dozen, Lbs	34	1	1 1/4	
Per Dozen	\$6.60	7.80	9.00	

One-half Dozen in a Box.

#### UNIVERSAL POCKET

#### Good Quality Painted Tape

Nickeloid Case, Spring Wind, Center Stop.

No.	165-5 ft. Long,	Weight
	Each 1/2 Oz	82.00
	One Dozen in a Di	isplay Box.



#### PRICE LIST OF FILES AND RASPS

Of the File Manufacturers' Association of the United States

#### ADOPTED LIST PRICE PER DOZEN EFFECTIVE ON AND AFTER

LIST OF APRIL 2, 1923

**APRIL 2, 1923** 

PRICE PER DOZEN

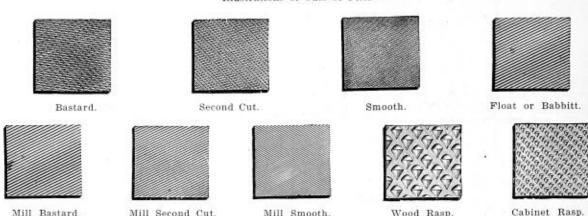
mou		MILL		MILL	1 R. E.	MILL :	2 R. E.	MILL	BLUNT				APERS	er	EXTRA	Double	HAND-	BANI	DSAW & TAPER		
INCH	BAST.	2d CUT	SMOOTH	BAST.	-2d CUT	BAST.	2d CUT	BAST.	2d CUT	INC	INC	u —	CUT DBL. CU	SLIM TAPERS	SLIM	Extra Slim	SAW	-	+	PITSAW	INC
3 4 5 6 7 8 9 10 12 14 16 18	3.00 3.00 3.20 3.50 3.90 4.30 4.90 5.60 7.50 10.70 14.70 20.20	3.50 3.80 4.00 4.60 4.90 5.80 6.40 8.60 12.20 16.80		3.90 4.40 4.80 5.50 6.30 8.40 12.00	4.50 5.20 5.50 6.50 7.20 9.70	4.40 4.90 5.40 6.10 7.00 9.40	5.00 6.10 8.00 10.80	3.90 4.30 4.90 6.70	4.90 5.80	3 4 5 6 7 8 9 10 12 14 16 18	3 3 4 4 5 5 6 7 8 10 12	1/2 2. 2. 2. 2. 2.	00 10 4.70 30 5.60 10 6.70	2.30 2.50 2.90 3.10 3.80	2.20 2.30 2.50 2.90 3.10 3.80 4.50	2.20 2.30 2.50 2.90 3.10 3.80 4.50	2.60 3.00 3.40 4.30 5.40 6.60	3.50 4.70 5.60	3.90 5.30	4.80 5.40 5.40 6.10 6.10 7.00 7.50	3 3 4 4 5 5 6 7 8 10 12
INCH		FLAT			HAND			SQUAF	RE	INCL	Luc	U TI	IREE SQ	UARE	НА	LF RO	UND		ROUNI	)	-
MUN	BAST.	2d CUT	SMOOTH	BAST.	2d CUT	SMOOTH	BAST.	2d CUT	SMOOTH	INC	INC	BAS	T. 2d CUT	SMOOTH	BAST.	2d CUT	SMOOT	BAST.	2d CUT	SMOOTH	INC
4 5 6 7 8 9 10 12 14 16 18 20	3.70 3.90 4.30 4.80 5.30 6.30 7.00 9.70 13.30 17.80 23.90 31.50	4.30 4.60 4.80 5.50 6.10 7.20 8.10 11.00 15.30 20.10 26.80	4.70 4.90 5.30 6.10 6.60 7.90 8.70 12.10 16.70 22.30 29.20	3.70 3.90 4.30 4.90 5.40 6.70 7.50 10.70 15.00 20.10 26.80 35.10	4.30 4.70 5.10 5.80 6.30 7.80 8.70 12.30 17.00 22.80 29.90	4.80 5.30 5.60 6.30 6.70 8.30 9.40 13.50 18.20 24.20 31.50	3.80 4.10 4.60 5.10 5.50 7.40 10.20 13.90 18.70 25.10 32.80	8.50 11.50 16.10 21.20 28.20	5.50 6.30 7.00 9.10 12.80 17.50 23.30	5 6 7 8 9 10 12 14 16 18 20	4 5 6 7 8 9 10 12 14 16 18 20	9.1 11.8 15.9 20.6 27.5	40 6.10 10 6.70 7.70 50 8.30 10 10.10 30 13.00 60 17.00 60 22.50	6.40 7.10 8.20 8.90 10.70 13.90 18.30 24.20	4.20 5.40 6.10 7.00 7.50 9.10 11.80 15.50 20.60 27.50	5.60 6.10 6.70 7.70 8.30 10.10 13.00 17.00 22.50 29.90	7.10 8.20 8.90 10.70 13.90 18.30 24.20	3.50 3.90 4.30 4.90 5.60 7.50 10.70 14.70	3.50 3.80 4.00 4.60 5.80 6.40 8.60 12.20 16.80 22.70	3.90 4.10 4.50 4.90 5.40 6.30 7.00 9.40 13.10 17.90 24.30	10 12 14 16 18 20
NCH	٧	VARDIN	ie .		KNIFE		INCH	INCH		PILLA	R	SQU.			FLOAT D FILES	INCH	INCH	HANDSAW BLUNT	DOUBLE		INC
	BAST.	2d CUT	SMOOTH	BAST.	2d CUT	SMOOTH			BAST.	2d CU	T SMO			Flat	HIf. Rd.			SLIM	ENDER	SAW	
4 5 6 8 10 12	4.00 4.50 4.90 6.40 8.70	4.80 5.30 5.90 7.50 10.10	5.40 5.80 6.40 8.20 11.00	5.40 6.10 6.90 8.50 10.10 13.70	6.10 6.70 7.50 9.10 11.50 15.20	6.40 7.10 7.90 9.50 12.30 16.10	4 5 6 8 10 12	6 8 10 12 14 16 18	4.30 5.40 7.50 10.70 15.00 20.10	5.10 6.30 8.70 12.30	) 6. 9. 13.	18.	20 7.50 90 10.70 70 14.70	6.30 8.60 11.80 16.00	18.50	6 8 10 12 14 16 18	4 5 6 7 8 9 10 12	2.50 3.10 3.80 5.40	3.50 3.90 4.40 4.90 6.00	4,70 5,40 6,10 6,40 8,70 11,40	10 11
INCH	CABINET		INET SPS	HALF	RD. RASPS		W00D SPS	N	HAND	6	INCH	INCH	s	HOE RA	SPS	PL	ANER	CROSS		SPECIAL	INC
	FILES	2d CUT	SMOOTH	BAST.	SMOOTH	BAST.	SMOOTH	H 2d CU	T SMOO				FLAT		HF. RD.	K	NIFE	unusa	CI	IOSS CUT	-
6 8 10 12 14 16	8.10 10.10 13.70 18.70 24.80	10.10 12.80 17.50 22.80 29.60	11.70 15.50 20.70 26.80 33.90	8.10 10.10 13.70 18.70 24.80 32.90	10.10 13.70 18.70 24.80 32.90 43.60	9.40 12.80 17.50 23.20 30.80	17.50 23.20 30.80	15.2 20.6	0 16.2	70	6 8 10 12 14 16	6 7 8 9 10 12	10.1 12.2 13.7	00	10.10 12.20 13.70		6.40  8.60	7.50 8.50 9.10 11.80		3.90 4.30 4.90 6.70	10
INCH		RASPS		0508140		SE RA	SPS, T		D		NCH	INCH	THE FO	LLOW	ING A	RE SPI	ECIAL	FILES			INC
12 13 14 15 16 18 20	33.90	14" Stk. 15" Stk. 16" Stk.	21.50 25.90	16.80 19.60 23.10 27.30 32.20	13" stoci 13" stoci 14" stoci	k 21.9	0 1.75 0 1.81	1'x .2 4'x .2 0'x .2 2'x .2	70° 16.	.20 .90 .20 .70	12 13 14 15 16 18 20	12 14 12 12 10 10 10	Flat Alu Flat Alu Hand B Flat Arr Last Ma Last Ma Pattern Pattern	minum rass Fi nory C kers C kers C Makers	Files ut File abinet abinet Cabin	No. No. s .No Rasps Rasps et Ras	76 162 204 Basts , 2d C ps, Bas	ord ut		. 16.00 . 15.00 . 13.30 . 19.50 . 24.00 . 20.60	11 11 11 11 11 11 11 11 11

THE ABOVE LIST COMPRISES ALL OF THE KINDS, SIZES AND CUTS OF FILES THAT WILL BE REGULARLY CARRIED IN STOCK. ANYTHING DIFFERING FROM THESE FILES WILL BE CONSIDERED AS SPECIAL AND WILL NOT BE MANUFACTURED EXCEPT IN CASE OF URGENT NECESSITY AND WHEN MANUFACTURED PRICE WILL BE BASED STRICTLY UPON COST OF MATERIAL AND COST OF MANUFACTURE AT TIME GOODS ARE MADE.

Mill Bastard.

#### FILES

Illustrations of Cuts of Files



## Mill Smooth. LIKE-HAND-CUT

Wood Rasp.

A New Commercial File Different from Any Other on the Market

The new type Like-Hand Cut File, manufactured by Heller Bros., departs radically from the conventional design and construction of commercial files now commonly employed in large manufacturing organizations.

The teeth of these files are cut much deeper than the teeth of the ordinary file.

Mill Second Cut.

An unusually excellent alloy file steel of special analysis is used in the manufacture of these files.

The teeth are exceptionally sharp as well as strong and scientifically raked. The file is subjected to a hardening process which really hardens and toughens. Careful inspection and testing of these files assures a uniform product.

This new Heller file resembles and performs superior to the highest priced hand-cut files obtainable. Tests made show that it will cut faster than any commercial file on the market today, in some cases, two to five times faster than other well known makes. This is a saving in file cost, production and labor costs.

To substantiate our claims that the new Like-Hand Cut File has no equal in its class on the market today, we ask you to make a test, a test at our expense. Simply ask us for a Like-Hand Cut File, put it on your own work. Test it and retest it. Put it on the toughest, hardest materials in your shops.

#### PREMIER BRAND

This is a standard machine cut file which compares favorably with the regular commercial files on the market. While it in no way compares with the Like-Hand Cut File in cutting quality or speed in production, we do not hesitate to recommend it in comparison with any regular standard brand of file for ordinary work.

#### LATHE FILES



Made Specially for Lathe Work, Long Angle, Deep Cut, Safe Edges.

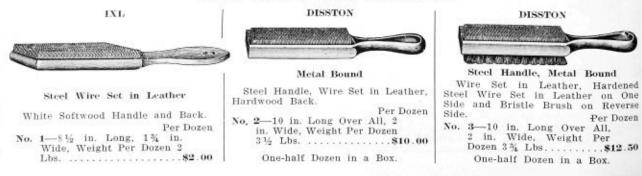
Made in 12 and 14 in, Lengths.

In addition to the above, we carry in stock, Bastard Files made specially for cutting brass. When Ordering, Specify Length and Shape Required.

#### RADIATOR FILES

We also have a Special File for Radiator Work, which has given the best of satisfaction. Upon receipt of request samples will be furnished for test.

#### FILE CARDS AND BRUSHES



#### FILES

#### LIKE-HAND-CUT AND PREMIER

For Description and Illustration of Cuts See Page 90

#### FLAT BASTARD

Length, Inches	4	5	6	8	10
Wt. Dozen, Lbs	1/2	1	2	4	7 1/2
Per Dozen	\$3.70	3.90	4.30	5.30	7.00
Length, Inches	12	14	16	18	20
Wt. Dozen, Lbs	13	19	27	39	46
Per Dozen	\$9.70	13.30	17.80	23.90	31.50
1	TLAT S	ECOND (	CUT		
Length, Inches	4	5	6	8	10
Wt. Dozen, Lbs	1/2	1	2	4	7 1/2
Per Dozen	\$4.30	4.60	4.80	6.10	8.10
Length, Inches		12	14	16	18
Weight Per Dozen,		13	19	27	39
Per Dozen		\$11.00	15.30	20.10	26.80
	FLAT	SMOOT	н		
Length, Inches	4	5		6	8
Wt. Dozen, Lbs	1/2	1		2	4
Per Dozen	\$4.70	4.9	00	5.30	6.60
Length, Inches	10	12	3	14	16
Wt. Dozen, Lbs	7 1/2	13	1	19	27
Per Dozen	\$8.70	12.	10	16.70	22.30

#### One-half Dozen in a Box.

#### HAND BASTARD

16:

Length, Inches 4	5	6	8	10
Wt. Dozen, Lbs 1	2	2 1/2	5	10
Per Dozen \$3.70			5.40	7.50
Length, Inches	12	14	16	18
Weight Per Dozen, Lbs	15	22	36	48
Per Dozen	\$10.70	15.00	20.10	26.80
HAND S	SECOND	CUT		
Length, Inches 4	5	6	8	10
Per Dozen \$4.30		5.10	6.30	8.70
Length, Inches	12	14	16	18
Per Dozen	\$12.30	17.00	22.80	29.90
HANI	SMOOT	H		
Length, Inches 4	5	6	8	10
Per Dozen \$4.80	5.30	5.60	6.70	9.40
Length, Inches	12	14	16	18
Per Dozen	\$13.50	18.20	24.20	31.50

#### HALF ROUND BASTARD

	e de Securita de		HELLER BROS. CO	
Length, Inches 4	5	6	8	10
Wt. Dozen, Lbs 1/2	1	1 1/2	5	8
Per Dozen \$4.80	5.40	6.10	7.50	9.10
Length, Inches				18
Weight Per Dozen, Lbs	12	17	2.5	38
Per Dozen			20.60	27.50
HALF ROU	ND SECO	ND CUT	r	
Length, Inches 4	5	6	8	10
Per Dozen \$5.60			8.30	10.10
Length, Inches	12	14	16	18
Per Dozen	\$13.00	17.00	22.50	29.90
HALF RO	OUND SM	HTOO		
Length, Inches 4	5	6	8	10
Per Dozen \$6.10		7.10	8.90	10.70
Length, Inches	12	14		18
Per Dozen	\$13.90	18.30	24.20	32.00
One-half I	Dozen in	a Box		

ROU	ND	BA	STA	CHI

0	(80)	SUPERIOR	THE STREET	-
Length, Inches 4 Diameter, Inches ½ Wt. Dozen, Lbs ½ Per Dozen \$3.00	5 % % 3.20	$egin{array}{c} 6 \\ 5^{7} \\ 2 \\ 1 \\ 3.50 \end{array}$	8 2 4.30	10 % 3 ½ 5 . 60
Length, Inches Diameter, Inches Weight Per Dozen, Lbs Per Dozen	$\frac{12}{\frac{1}{2}}$ 7 87.50	$\frac{14}{\frac{5}{8}}$ $\frac{13}{10.70}$	16 % 21 14.70	18 <sup>7</sup> / <sub>8</sub> <sup>27</sup> <sup>20</sup> · <sup>20</sup>
ROUND Length, Inches 4 Per Dozen \$3.50	5	CUT 6 4.00	8 4.90	10 6.40
Length, Inches		$\begin{array}{c} 14 \\ 12.20 \end{array}$	$\begin{matrix} 16 \\ 16.80 \end{matrix}$	$\frac{18}{22.70}$
ROUN	D SMOO			20020
Length, Inches 4 Per Dozen \$3.90		$\frac{6}{4.50}$	5.40	$\frac{10}{7.00}$
Length, Inches Per Dozen One-half D	\$9.40	14 13.10 a Box.	$16 \\ 17.90$	$\frac{18}{24.30}$

#### SQUARE BASTARD

Length, Inches 4	5	6	8	10
Diameter, Inches 1/4	18	33	32	3/8
Wt. Dozen, Lbs ½ Per Dozen \$3.8	0 4.10	4.60	5.50	7.40
Length, Inches	. 12	14	16	18
Diameter, Inches	. 1/2	5/8	34	76
Weight Per Dozen, Lbs.		16	27	35
Per Dozen	. \$10.20	13.90	18.70	25.10
SQUAR	E SECONI	CUT		
Length, Inches 4	5	6	8	10
Per Dozen \$4.60	0 4.80	5.10	6.30	8.50
Length, Inches	. 12	14	16	18
Per Dozen		16.10	21.20	28.20
SQU	ARE SMO	OTH		
Length, Inches 4	5	6	8	10
Per Dozen \$4.9	0 5.30	5.50	7.00	9.10
Length, Inches	. 12	14	16	18
Per Dozen		17.50	23.30	30.40

#### MILL BASTARD, SQUARE EDGE

Length, Inches Wt. Dozen, Lbs Per Dozen		$\frac{5}{1}$	$\frac{6}{1\frac{1}{2}}$	8 3 4.30
Length, Inches Wt. Dozen, Lbs Per Dozen	10 6	12 12	14 15 10.70	16 17 14.70
		T, SQUARE	EDGE	
Length, Inches Per Dozen		3.80	4.00	4.90
Length, Inches Per Dozen	10	8.60	$\frac{14}{12.20}$	16 16.80
		SQUARE E		
Length, In 6 Per Dozen \$4.56	5.49	10 12 7.00 9.40 in a Box.	14 0 13.10	16 17.90

#### MILL BASTARD, WITH ONE ROUND EDGE

Land Street Street	1000		-	
Length, Inches	6	8	10	12
Weight Dozen, Lbs		3	6	12
Per Dozen	\$3.90	4.80	6.30	8.40
One	Dozen in	a Box.		

#### FILES

#### LIKE-HAND-CUT AND PREMIER

For Description and Illustrations of Cuts See Page 90

MILL BASTARD, WITH TWO ROUND EDGES	MILL	BASTARD,	WITH	TWO	ROUND	EDGES
------------------------------------	------	----------	------	-----	-------	-------

		(a)	No.	-
Length, Inches	6	8	10	12
Weight Dozen, Lbs	1 1/2	3	6	12
Per Dozen	\$4.40	5.40	7.00	9.40
One	Dozen in	a Roy		

#### PILLAR BASTARD

Length, Inches	4	5	6	8	10	12
Weight Dozen, Lbs	34	1 1/2	2 1/2	4	8	12
Per Dozen						
PIL	LAR SI	ECON	D CU	r		
Length, Inches	4	5	6	8	10	12
Per Dozen	\$5.10	5.10	5.10	6.30	8.70	12.30
P	ILLAR	SMO	OTH			
Length, Inches	4	5	6	8	10	12
Per Dozen	\$5.60	5.60	5.60	6.70	9.40	13.50
			- 22			

# One Dozen in a Box. WARDING BASTARD

			(A)	C OFF	-
Length, Inches	4	5	6	8	10
Weight Dozen, Lbs	1/2	5%	1	2	4
Per Dozen	\$4.00	4.50	4.90	6.40	8.70
WARI	DING SI	ECOND	CUT		
Length, Inches	4	5	6	8	10
Per Dozen	\$4.80	5.30	5.90	7.50	10.10
WAI	RDING	SMOOT	H		
Length, Inches	4	5	6	8	10
Per Dozen	\$5.40	5.80	6.40	8.20	11.00
One	Dozen	in a B	ox.		

#### KNIFE BASTARD

				100		
Length, Inches	4	5	6	8	10	12
Weight Dozen, Lbs.	1/2	1	1 1/4	2	6	8
Per Dozen	\$5.40	6.10	6.90	8.50	10.10	13.70
K	NIFE S	ECON	D CU	Т		
Length, Inches	4	5	6	8	10	12
Per Dozen	\$6.10	6.70	7.50	9.10	11.50	15.20
	KNIFE	SMO	OTH			
Length, Inches	4	5	6	8	10	12
Per Dozen	86.40	7.10	7.90	9.50	12.30	16.10
	ne Doze					

#### PLANER KNIFE

s																		
																	,	\$6.40
One-	-half		Dσ	124	en		in		a	В	03	ζ.						
	One	One-half	One-half	One-half Do	One-half Doz	One-half Dozen	One-half Dozen	One-half Dozen in	One-half Dozen in	One-half Dozen in a	One-half Dozen in a B	One-half Dozen in a Box	One-half Dozen in a Box.					

	<b>COLUMN STA</b>	00200	ACTUM BE	EUT.	-
Length, Inches Weight Dozen, Lbs Per Dozen \$2	3/8 1/2	34		1 %	5 1/2 1 3/4 3 . 00
Length, Inches	2	4.30		10 7 8.10	

#### SLIM TAPER SAW, SINGLE CUT

The same of the Control of the Contr	et emografia (analysis)	ettosepentin.		(Appendi	
Length, Inches Weight Per Dozen, Lbs. Per Dozen	14.	3 1/2 1/4 2.10	4 % 2.20	4 ½ ½ 2.30	5 % 2.50
Length, Inches Weight Per Dozen, Lbs Per Dozen			6 1 1/4 3 . 10	7 2 3.80	8 3 4.50
		n a Box	۲.		

#### EXTRA SLIM TAPER SAW, SINGLE CUT

<	MILL NAME OF THE OWNER,	THE RESERVE TO	-
Length, Inches 4 Weight Dozen, Lbs 1/4	4 1/2	5 ½	514
Per Dozen	2.30	2.50	2.90
Length, Inches	6 34	7	8 1 1/2
	83.10	3.80	4.50

#### DOUBLE EXTRA SLIM TAPER SAW, SINGLE CUT

Length, Inche	es	5	516	6	7	8
Weight Dozen			1/2	5/8	3/4	1
Per Dozen .		\$2.50	2.90	3.10	3.80	4.50
rei Dozen .		Dozen i			0.00	*

#### DOUBLE END TAPER SAW

1110 To 10 T		and the same of the same of		
Length, Inches	7	8	9	10
Weight Per Dozen, Lbs	1	1 1/2	2	2 %
Per Dozen	\$3.50	3.90	4.40	4.90
One Doze	en in a	Box.		

#### REGULAR BLUNT BAND SAW

No. of the second secon

	SA SECTION	COURSE OF THE PARTY OF THE PART	
Length, Inches	6	8	10
Weight Per Dozen, Lbs	1 1/2	3	6
Per Dozen	\$4.70	6.70	9.70
One Dozen	in a Box	ζ.	

#### SLIM BLUNT BAND SAW

43	Winds Constitute	ALIENS AND AND	Approx.
Length, Inches	6	8	10
Weight Per Dozen, Lbs	1 1/4	2 1/2	5 1/2
Per Dozen	\$3.90	5.30	7.50
One Dozen in	a Box.		

#### TAPER BAND SAW

		200	
Length, Inches	6	8	10
Weight Per Dozen, Lbs		2 1/2	5 3/2
Per Dozen		6.70	9.70
One Dozer	in a Bo	X.	

#### SLIM TAPER BAND SAW

Commence of the second	TOLK
Length, Inches 6	8
Weight Per Dozen, Lbs 11/4	3
Per Dozen	5.30

#### FILES

#### LIKE-HAND-CUT AND PREMIER

RASPS

For Description and Illustrations of Cuts See Page 90

#### CANT OR LIGHTNING SAW

Len Wt. Per

( promise and the	AND DESCRIPTION OF THE PARTY OF	D HOLLE SANDER	
For Filing	Cross Cut Sav	78.	
gth, Inches 6	. 8	10	12
Dozen, Lbs 1 1/2	3	5	- 8
Dozen \$5.40	6.40	8.70	11.40
One Doz	en in a Box.		

#### GREAT AMERICAN CROSS CUT

	HILLY GOLD.
For Filing Cross Cut Saws.	
Length, Inches	8 10
Weight Per Dozen, Lbs 3	1/2 6
Per Dozen \$7	.50 9.10
One Dozen in a Box.	

#### HALF ROUND CABINET



Wider and thinner than Regular Half Round Files, used by Cabinet Makers and Woodworkers.

Length, Inches	8	10	12	14
Wt. Dozen, Lbs		9	14	16
Per Dozen 5	810.10	13.70	18.70	24.80
One-	half Doze	en in a Be	OX.	

#### FLAT FLOAT OR BABBITT

#### For Lead, Babbitt, Solder, Aluminum and Wood

Used by Body Builders, Fender and Body Repairing, Pattern and Cabinet Makers.

Vallatitatitati				WITH BADE DE	_
Length, Inches	6	8	10	12	14
Wt. Dozen, Lbs	2	4	8	14	20
Per Dozen	\$4.80	6.30	9.70	13.30	17.80
	e-half D	ozen in	a Box		

#### AUGER BIT



#### Double End Made in two sizes and styles. The 7 in, size is flat both

Made flat both ends and cut one end on the flat sides and the other on the edges. Length, Inches Weight Dozen, Lbs.... . 86.50 Per Dozen .....

## One Dozen in a Box. PLATINUM POINT

# The supplied to the supplied t

#### With Round Handle

For Cleaning Contact Coils, etc.	Points of Spar	k Plugs, Magnetos,
Length Over All, Inches.		634
Length Blade, Inches		3 %
Per Dozen		

#### FLAT WOOD

			þ	1	
Length, Inches	8	10	12	14	16
Weight Dozen, Lbs.		7	12	18	2.6
Per Dozen	\$9.40	12.80	17.50	23.20	30.80
On	e-half D	ozen in	a Box.		

#### HALF ROUND CABINET



Wider and thinner than Half Round Wood, used by Cabinet Makers and Woodworkers in general, 10 Length, Inches...... 8 12 Weight Per Dozen, Lbs... 4 Per Dozen ...... \$12.00 10 17.50 22.80 One-half Dozen in a Box.

#### HALF ROUND WOOD



Used by Wheelwrights and Carriage Builders, and to some extent by Plumbers and Marble Workers. Length, Inches.... 8 10 12 14

Weight Dozen, Lbs. 4 6 10 14 Per Dozen . . . . . . . . \$10.10 13.70 18.70 24.80 One-half Dozen in a Box.

#### HALF ROUND SHOE



For Leather and other similar materials. 10 Length, Inches . . . . . . 6 Weight Per Dozen, Lbs... 10 13.70 88.10 10.10 Per Dozen ..... One-half Dozen in a Box.

#### PLAIN HORSE



Coarse Rasp cut on one face, coarse double cut File cut on reverse face, coarse single cut on edges. 16 18 Length, Inches . . . . . . . 14 29 42 32.90 Per Dozen ...... 24.40

#### One-half Dozen in a Box. TANGED HORSE



36 28 Weight Per Dozen, Lbs..... . . . . . . . . . . . \$23.10 32.20 Per Dozen ..... One-half Dozen in a Box.

#### HELLER HORSE TOOTH



Per Dozen No. 3-Adjustable Float, 20 in. Long, Polished, Hard-One in a Box.



#### HORSE TOOTH FLOATS

Per Dozen No. 7-Rasp Cut, Will Fit No. 3 Horse Tooth Rasp .. \$7.00 One Dozen in a Box.

AMERICAN SWISS	FILE AND TOOL CO.
HAND	KNIFE
	Toronto.
Length, Inches 3 4 5 6 8 10  Nos. 00 and 0, Dozen, \$2.80 3.40 3.90 4.25 6.00 7.70  No. 2	Length, Inches
PILLAR	2 Cardinas South
Length, Inches 3 4 5 6 8 10  Nos. 00 and 0, Dozen, \$2.35 2.80 3.10 3.10 5.10 7.00  No. 2 Dozen, 2.35 2.80 3.25 3.25 5.25 7.25  No. 4	Length, Inches
NARROW PILLAR	
Length, Inches 3 4 5 6 8 10 Nos. 00 and 0, Dozen, \$2.35 2.80 3.10 3.10 4.10 5.80 No. 2 Dozen, 2.35 2.80 3.20 3.20 4.30 5.55 No. 4 Dozen, 2.50 3.00 3.50 3.50 4.45 5.90 No. 6 Dozen, 2.65 3.25 3.70 3.70 5.30 7.45	Length, Inches
EXTRA NARROW PILLAR	0 0 Australia
Length, Inches	Length, Inches
SQUARE  Length, Inches 3 4 5 6 8 10  Nos. 00 and 0, Dozen, \$1.90 2.65 3.25 3.60 5.60 6.90	Length, Inches.     3     4     5     6     8       Nos. 00 and 0, Dozen, \$2.75     3.30     3.90     4.20     7.00       No. 2     Dozen, 2.85     3.45     4.05     4.45     7.15       No. 4     Dozen, 3.00     3.60     4.35     4.95     7.60       No. 6     Dozen, 3.15     3.80     4.75     5.50     8.30
No. 2	CANT
No. 6 Dozen, 2.25 3.15 3.75 4.45 6.90 8.90	The state of the s
ROUND  Length, Inches 3 4 5 6 8 10  Nos. 00 and 0, Dozen, \$2.10 2.50 3.05 3.05 4.85 6.65  No. 2 Dozen, 2.20 2.60 3.15 3.15 5.05 7.00	Length, Inches 3 4 5 Nos. 00 and 0 Dozen, \$4.05 5.95 6.75 No. 2 Dozen, 4.40 6.25 7.10 No. 4 Dozen, 4.90 6.75 7.75  METAL SAW
No. 4	Length, Inches.     3     4     5     6     8       No. 0     Dozen, \$2.85     3.45     3.90     4.40     5.90       No. 2     Dozen, 2.95     3.55     4.00     4.50     6.00       No. 4     Dozen, 3.05     3.90     4.35     5.00     6.50
Length, Inches 3 4 5 6 8 10	CROCHET
Nos. 00 and 0, Doz., \$3.55 4.20 4.60 5.40 8.10 10.15 No. 2	Length, Inches 3 4 5 6 8 Nos. 00 and 0, Dozen, \$3.65 4.30 4.85 6.25 8.90 No. 2
ALTERNATION OF THE PARTY OF THE	
Length, Inches.     3     4     5     6     8     10       Nos. 00 and 0, Doz., \$3.55 4.75 5.90 6.60 10.60 13.25       No. 2     Doz., 3.60 4.90 6.05 6.75 11.15 14.20       No. 4     Doz., 3.75 5.00 6.20 7.15 11.70 14.90       No. 6     Doz., 3.90 5.05 6.45 7.60 13.15 16.55	Length, Inches

AMERICAN SWISS FILE & TOOL CO.

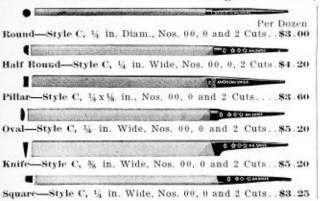
SLITTING .		THIN ROUND EDGE JOINT
	_	12 Westworms
Length, Inches       4       5         Nos, 00 and 0       Per Dozen, \$4.65       6.25         No. 2       Per Dozen, 4.80       6.60         No. 4       Per Dozen, 5.90       7.85         PIPPIN	$\begin{matrix} 6 \\ 8.15 \\ 8.40 \\ 9.65 \end{matrix}$	Length. Inches 3 4 5 6 8 No. 0 Per Dozen, \$2.60 2.90 3.75 4.10 5.40 No. 2 Per Dozen, 2.60 2.90 3.75 4.10 5.40 SQUARE EDGE JOINT
Q Assista	_	15 g was con runts
Length, Inches 3 4 5 6 No. 0 Per Dozen, \$3.50 4.40 5.20 6.25 No. 2 Per Dozen, 3.60 4.70 5.55 6.50 No. 4 Per Dozen, 3.80 5.00 6.10 6.80 ROUND HANDLE NEEDLE	8 9.60 9.75 10.20	Length. Inches 3 4 5 6 8 No. 0 Per Dozen, \$2.60 2.90 3.75 4.10 5.40 No. 2 Per Dozen, 2.60 2.90 3.75 4.10 5.40 DIE SINKERS
Round, No. 0 Cut		Flat, No. 0 Cut
Length, Inches	634 2.60	Length, Inches
Half Round, No. 0 Cut	_	Auriform, No. 0 Cut
Length, Inches	6 % 2 . 60	Length, Inches
Flat, No. 0 Cut		Oval, One Sharp Edge, No. 0 Cut
Length, Inches	634 2.60	Length, Inches
Oval, No. 0 Cut	-	Oval, No. 0 Cut
Length, Inches	2.60	Length, Inches 33½ Per Dozen 83.40
Knife, No. 0 Cut	_	Half Round, No. 0 Cut
Length, Inches	6 14 2 . 60	Length, Inches
Square, No. 0 Cut  Length, Inches	634 2.60	Round, No. 0 Cut  Length, Inches 3½  Per Dozen \$3.40
Three Square, No. 0 Cut  Length, Inches	634 2.60	Knife, No. 0 Cut  Length, Inches
Equaling, No. 0 Cut  Length, Inches	634 2.60	Flat, Two Round Edges, No. 0 Cut  Length, Inches
Barrette, No. 0 Cut	50 100 apr	Flat, One Safe Edge, No. 0 Cut
Length, Inches	6 14 2 . 60	Length, Inches
Joint, No. 0 Cut	_	Lozenge, No. 0 Cut
Length, Inches	6 14 2 . 60	Length, Inches
Slitting, No. 0 Cut		Square, No. 0 Cut
Length, Inches	6¾ 2.60	Length, Inches
Marking, No. 0 Cut		Three Square, No. 0 Cut
Length, Inches 5½ Per Dozen \$2.30	6 14 2 . 60	Length, Inches       3 ½         Per Dozen       \$3 40
ROUND HANDLE NEEDLE, IN SETS 5 1/2 in. Assorted—Per Set of 12	.\$2.30 . 2.60	DIE SINKERS, IN SETS  Assorted—Per Set of 12\$3.40  Note—Always state number of cut wanted.  Dozen in a Box.

AMERICAN SWISS FILE AND TOOL CO. SQUARE HANDLE ESCAPEMENT

- 1 CC 2 A-1915	for y fining p
Round, No. 0 Cut Length, Inches	Three Square, No. 0 Cut Length, Inches
Per Dozen \$2.60	Per Dozen \$2.60
Crossing, No. 0 Cut	Half Round, No. 0 Cut
Length, Inches         5½           Per Dozen         \$2.60	Length, Inches
Barrette, No. 0 Cut	Square, No. 0 Cut
Length, Inches 5½ Per Dozen \$2.60	Length, Inches
Flat, No. 0 Cut	Knife, No. 0 Cut
Length, Inches       5 ½         Per Dozen       \$2.60	
ESCAPEMENT I 512 Inch Assorted—Per Set of 8, One Each of Above P	FILES IN SETS Per Set
DIE SINKERS RIFFLERS	SILVERSMITHS RIFFLERS
	Danie Comment
18 Assorted Styles and Shapes in a Set Length, Inches 6 6½ 7	12 Assorted Styles and Shapes in a Set Length, Inches
	Per Set
BENCH FILING N	MACHINE FILES
STYL 3¼ in, Long Over All, ¼ in, Diamete	
	, vacantamentamentamentamentamentamentamentam
Per Dozen	Per Dozen
Round—Nos. 00, 0 and 2 Cuts\$3.90	Three Square—Nos. 00, 0 and 2 Cuts\$3.90
Per Dozen	DET O Z
Half Round—Nos. 00, 0 and 2 Cuts\$3.90	Crochet—Nos. 00, 0 and 2 Cuts\$3.90
Per Dozen	Per Dozen
Pillar—Nos. 00, 0 and 2 Cuts\$3.90	Equalling—Nos. 00, 0 and 2 Cuts
S (1 + 4)	- 8 位 4 位
Oval—Nos. 00, 0 and 2 Cuts	Pippin—Nos. 00, 0 and 2 Cuts
<b>→ 3 + 4</b>	
Knife—Nos. 00, 0 and 2 Cuts	Lozenge—Nos. 00, 0 and 2 Cuts
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(Management of the Control of the Co
Square—Nos. 00, 0 and 2 Cuts	Cant—Nos. 00, 0 and 2 Cuts
No. A Set-12 Assorted Shapes, One Each of Above Style	Per Set
THIN BENCH FILIN	G MACHINE FILES
STYI	LE B
	er Round Shank, Made in Three Cuts
Round—Nos. 00, 0 and 2 Cuts.         \$3.60           Half Round—Nos. 00, 0 and 2 Cuts.         3.60           Pillar—Nos. 00, 0 and 2 Cuts.         3.60           Oval—Nos. 00, 0 and 2 Cuts.         3.60           Knife—Nos. 00, 0 and 2 Cuts.         3.60           Square—Nos. 00, 0 and 2 Cuts.         3.60	Three Square—Nos. 00, 0 and 2 Cuts         S3.60           Crochet—Nos. 00, 0 and 2 Cuts         3.60           Equalling—Nos. 00, 0 and 2 Cuts         3.60           Pippin—Nos. 00, 0 and 2 Cuts         3.60           Lozenge—Nos. 00, 0 and 2 Cuts         3.60           Cant—Nos. 00, 0 and 2 Cuts         3.60           Cant—Nos. 00, 0 and 2 Cuts         3.60
No. B Sct-12 Assorted Shapes, One Each of Above Styl	Par Set
Oval—Nos. 00, 0 and 2 Cuts	Pappin - Nos. 00, 0 and 2 Cuts   3.6

AMERICAN SWISS FILE AND TOOL CO. PARALLEL MACHINE

Length of Cut 5 in., Made in Three Cuts



Per Dozen

Three Square—Style C, \$\beta\_c\$ in. Wide, Nos. \$00, 0, 2 Cuts. \$3.60

Crochet—Style C, \$\beta\_4\$ x \$\beta\_0\$ in., Nos. \$00, 0 and 2 Cuts. \$4.80

Round Edge Joint—Style C, \$\beta\_4\$ x \$\beta\_0\$ in., Nos. \$00, 0 and 2 Cuts. \$3.60

Pippin—Style C, \$\beta\_2\$ in. Wide, Nos. \$00, 0 and 2 Cuts. \$5.20

Lozenge—Style C, \$\beta\_6\$ x \$\beta\_0\$ in., Nos. \$00, 0 and 2 Cuts. \$5.40

Crossing—Style C, \$\beta\_6\$ x \$\beta\_5\$ in., Nos. \$00, 0 and 2 Cuts. \$5.20

# VIXEN FILES PATENT CUT AND KEEN CUT

Vixen Files are made in two styles—the tang style is the same as the ordinary file, except that it is parallel. The flexible style is attached to a back to give it rigidity; the back may be straight or bent before the blade is attached, thereby giving it a convexity necessary on many classes of work.

Vixen Patent Cut Files

The teeth are curved undercut which gives a shearing cut. Each tooth is individually milled from solid alloy steel, the individual cutting produces a better file than the usual hammering or striking up process.

Vixen Keen Cut Files

Are produced by a new and improved method which differs somewhat from the methods involved in the production of Vixen Patent Files.

Vixen Diagonal Cut Files

With teeth diagonally arranged at 75 degree angle. This type has been found highly satisfactory on certain kinds of work. The teeth are deeply cut and scientifically raked, therefore the file cuts fast; keen and wears for a considerable time.

FLAT

Prices Per Dozen

 Length, Inches.
 8
 10
 12
 14
 16
 18

 Wt. Dozen, Lbs.
 3 \(3\)
 6 \(3\)
 10 \(3\)
 14 \(3\)
 25 \(3\)
 31 \(3\)

 Regular
 \$12.90
 16.10
 19.40
 23.30
 27.90
 33.70

 Fine
 15.50
 18.80
 22.20
 25.90
 30.40
 36.30

 Smooth
 16.90
 20.10
 23.30
 27.10
 31.80
 37.50

FLAT UTILITY
Length, Inches . 8 10 12 14 16
Per Dozen . . . . \$14.80 18.10 21.30 25.30 29.70
Utility Files are cut one side regular and the other side

HALF ROUND

Babbitt Files have 8 Teeth Per Inch.

 Length, Inches
 8
 10
 12
 14
 16

 Regular
 Per Dozen, \$15.10
 18.30
 21.70
 26.00
 31.00

 Fine
 Per Dozen, 17.80
 21.00
 24.40
 28.40
 33.50

 Smooth
 Per Dozen, 19.10
 22.30
 25.50
 29.40
 34.90

 HALF
 OVAL

 PILLAR

Vixte Length, Inches 12 14 17.70 Regular . . . . Per Dozen, \$14.10 21.50 25.10 Fine ......Per Dozen, 27.90 17.00 20.40 24.10 Smooth ..... Per Dozen, 22.00 25.10 18.40 29.70

SQUARE

Length, Inches ...... 8 10 12 14 Regular ..... Per Dozen, \$13.50 16.90 20.40 24.50

\*FLEXIBLE

Length, Inches . . . . . 8 10 12 14 1

 Length, Inches
 8
 10
 12
 14
 16

 Weight Dozen, Lbs.
 1 %
 2 %
 4 %
 7 %
 11 ½

 Regular
 Per Dozen, \$14 .20
 17 .80
 21 .40
 25 .70
 30 .70

 Fine
 Per Dozen, 17 .10
 20 .70
 24 .30
 28 .50
 33 .40

 Smooth
 Per Dozen, 18 .50
 22 .10
 25 .70
 29 .90
 34 .90

 Backs
 Per Dozen, 7 .20
 7 .80
 8 .40
 9 .00
 9 .60

 Bolt and Nut. Dz. Sets, 2 .40
 2 .40
 2 .40
 3 .00
 3 .00
 3 .60
 3 .99

 Resharpening
 Dozen, 2 .70
 3 .00
 3 .40
 3 .60
 3 .99

\*Flexible Files are cut on both sides and must be attached to a back when in use. One back given with each dozen flexible files of a size.

Flat Tanged and Flat Flexible, are made in Vixen Patent, Keen and Diagonal Cut. Square, Half Round, Half Oval Tanged and Half Oval Flexible are made in Keen Cut only, Flat Utility, Babbitt and Pillar Tanged are made in Vixen Patent only.

Note—When ordering Vixen Files always state the style required.

All Above, One-half Dozen in a Box.

#### UTICA PLIERS

#### LINEMENS HEAVY SIDE CUTTING



No. 1950—Beveled Face Forged Steel, Checkered Handles, Blue Gun Metal Finish. 
 Length, Inches......
 6
 7

 Weight Dozen, Lbs...
 5 ¾
 9 ¼
 8 9 1336 15 1/2 Per Dozen ..... \$20.42 24.94 28.42 37.90

#### STANDARD SIDE CUTTING



No. 50-Lap Joint Forged Steel, Checkered Handles, Blue Gun Metal Finish. 
 Length, Inches
 5
 6
 7
 8

 Weight Dozen, Lbs
 3¼
 6¼
 7¾
 10¼

 Per Dozen
 \$13.95
 15.15
 16.75
 18.2
 10 % 18.20

#### REGULAR SIDE CUTTING



No. 1050-Lap Joint Forged Steel, Smooth Handles, Black Finish. Length, Inches . . . . 4 5 6 7 Wt. Dozen, Lbs . . . 2 3 1/4 6 1/4 7 3/4 8 10 % Per Dozen..... \$10.40 11.35 12.60 13.68 15.15

#### COMBINATION SIDE CUTTING



No. 700-With Pipe Grip and Three Cutters Forged Steel, Checkered Handles, Blue Gun Metal Finish. 
 Length, Inches
 7

 Weight Dozen, Lbs
 8½
 

#### FLAT NOSE BURNER



No. 25-With Side Cutter Forged Steel, Checkered Handles, Blue Gun Metal Finish. 
 Length, Inches
 5½

 Weight Dozen, Lbs
 3 %
 

#### ROUND NOSE BURNER



No. 325-With Side Cutter Forged Steel, Checkered Handles, Blue Gun Metal Finish. 

 Forged Steel
 Chength, Inches
 5½
 Length, Inches
 5½

 Weight Dozen, Lbs
 3%
 Weight Dozen, Lbs
 2½

 Per Dozen
 \$16.45
 Per Dozen
 \$21.06

#### LONG NOSE SIDE CUTTING



No. 654—Lap Joint Forged Steel, Checkered Handles, Blue Gun Metal Finish. 

 Length, Inches
 532
 6

 Weight Dozen, Lbs
 3
 4

 Per Dozen
 \$16.80
 18.9

 18.90

MACHINISTS SHORT CHAIN NOSE SIDE CUTTING



No. 622-Lap Joint Forged Steel, Checkered Handles, Blue Gun Metal Finish. Length, Inches ...... 5 Weight Dozen, Lbs..... Per Dozen ......\$14.10

#### LONG REACH FLAT NOSE SIDE CUTTING



No. 650-Lap Joint Forged Steel, Checkered Handles, Blue Gun Metal Finish. 
 Length, Inches
 53/2

 Weight Dozen, Lbs
 3 ½
 21.06

#### JEWELERS LONG CHAIN NOSE



No. 1033-Lap Joint Forged Steel, Checkered Handles, Blue Gun Metal Finish. 
 Length, Inches
 5½

 Weight Dozen, Lbs
 2¼
 16.25



No. 777-Lap Joint Forged Steel, Checkered Handles, Blue Gun Metal Finish. 

CURVED NEEDLE NOSE



No. 888-Lap Joint Forged Steel, Checkered Handles, Blue Gun Metal Finish.

#### UTICA PLIERS



No. 20-Lap Joint Forged Steel, Smooth Handles, Blue Gun Metal Finish. Length, Inches . . . . . 4 4 ½ 5 5 ½ 6 Weight Dozen, Lbs . . . 1 ¾ 2 2 ¾ 3 ¼ 4 ½ Per Dozen ....... \$10.10 10.62 11.04 11.78 12.62

# ROUND NOSE

No. 21-Lap Joint Forged Steel, Smooth Handles, Blue Gun Metal Finish. Length, Inches ..... 4 4  $\frac{1}{2}$  5 5  $\frac{1}{2}$  6 Weight Dozen, Lbs... 1  $\frac{3}{4}$  2 2  $\frac{3}{4}$  3  $\frac{1}{4}$  4  $\frac{1}{2}$ Per Dozen ...... \$10.10 10.62 11.04 11.78 12.62



No. 22-Lap Joint Forged Steel, Smooth Handles, Blue Gun Metal Finish. Length, Inches...... 4 4½ 5 5½ 6 Weight Dozen, Lbs... 1½ 2 2¾ 3¼ 4½ Per Dozen ...... \$10.10 10.62 11.04 11.78 12.62



No. 5-Box Joint Forged Steel, Smooth Handles, Blue Gun Metal Finish. 

 Length, Inches
 4 ½

 Weight Per Dozen, Lbs
 2

 Per Dozen
 \$15.06

 51/2 3 14 16.50



No. 4-Box Joint Forged Steel, Smooth Handle, Blue Gun Metal Finish. 5 14 3 14 Per Dozen ..... \$15.06 16.50



No. 1000-With Four Wire Cutters Forged Steel, Checkered Handles, Blue Gun Metal Finish. 
 Length, Inches
 4 ½
 6
 8
 10

 Weight Per Dozen, Lbs
 5
 6 ¾
 10 ½
 17 ¾
 Per Dozen ..... \$9.48 10.74 12.94 17.16 Per Dozen ..... \$25.50



No. 86-Lap Joint, Flat Jaw Forged Steel, Smooth Handles, Blue Gun Metal Finish. Length, Inches 5½
Weight Per Dozen, Lbs 4% Per Dozen ...... \$15.20

GAS PIPE AND BURNER



No. 1300-Lap Joint Forged Steel, Checkered Handles, Blue Gun Metal Finish. Length, Inches...... 5 6 7 8 10 Weight Dozen, Lbs... 4 5 6 4 9 4 15 4 Per Dozen ...... \$10.00 11.58 13.16 14.74 16.84

HIGH GRADE DIAGONAL



No. 42-Box Joint Forged Steel, Checkered Handles, Blue Gun Metal Finish. Length, Inches ...... 4
Weight Per Dozen, Lbs... 2 4 1/2 2 1/8 Per Dozen ...... \$18.00 18.90 20.20 

 Length, Inches
 5½

 Weight Per Dozen, Lbs
 3½

 Per Dozen
 \$21.85

 6 4 1/4 23.55

STANDARD DIAGONAL



No. 41-Lap Joint Forged Steel, Smooth Handles, Blue Gun Metal Finish. Per Dozen ..... \$16.65

GIANT DIAGONAL



No. 40-Lap Joint Forged Steel, Smooth Handles, Blue Gun Metal Finish. Length, Inches ..... 7 Weight Per Dozen, Lbs..... 

PENCE

No. 1900-Stretches or Cuts Wire, Pulls and Drives Staples Forged Steel, Checkered Handles, Blue Gun Metal Finish.

 Length, Inches
 10

 Weight Per Dozen, Lbs.
 20

#### KRAEUTER PLIERS

Forged from High Grade Tool Steel, Heated and Tempered in Automatic Furnaces, Accurate Milled Teeth Specially Tempered, Precision Fitted Joints, "Don't Slip" Handles which gives Added Comfort to the Hand and Prevents Slipping Especially when Hands are Greasy. Each Plier Tested before Leaving Factory.

Kracuter Finish is a High Lustrous Crocus Effect, Offset in the Special Designed Handles with a Velvety Black

Forming a Pleasing Contrast.



	No.	1801-Forged	Steel,	Kraeuter	Finish.	
Length.	Inc	hes		6	7	814
Weight	Eac	h, Oz	. 7	1/2	11	15 1/2
Per Do	zen		. \$20	0.00	24.50	28.00

Will stand unusual strains and maintain enduring cutting edges. Every Plier is individually treated and hand fitted by skilled mechanics, and is joined with a rivet as hard as file steel.

#### KRAEUTER SIDE CUTTING



No. 1831—Forged	Steel, Kraeuter	Finish.	
Length, Inches	. 6 1/2	7	8
Weight Each, Oz	7 1/2	9	13
Per Dozen	. \$15.00	16.60	18.00

#### UNIVERSAL CUTTING



	NO. 183	21-1	Orge	ed Steel, Krae	uter runsn.	
Length,	Inches				6 1/2	7 1/2
Weight	Each,	Oz			7 1/2	10 1/2
Per Doz	en				\$17.00	18.50

#### KRAEUTER BUTTONS PATTERN



With Pipe Gripping J			
Length, Inches	6 3/2	8	10
Weight Each, Oz	8 1/2	13	18 1/2
Per Dozen	\$11.00	13.00	17.00

FLAT NOSE

No. 1601—Forged	Steel, K	racuter Finish.	
Length, Inches	. 4	5	6
Weight Each, Oz	. 2	3 1/2	5 %
Per Dozen	. \$10.0	00 11.00	12.50

ROUND NOSE

# = Pak

No. 1611—Forged S	steel, Kracute	r Finish.	
Length, Inches	4	5	6
Weight Each, Oz	2	3	5
Per Dozen	\$10.00	11.00	12.50

# LIGHT EXTRA LONG FLAT NOSE

	No.	17	41-	_	F	or	g	eć	1	S	te	e	1,	K	r	ie	u	te	r	1	F	in	is	sh.	
Length,	Inc	hes		, .												. ,									6
Weight																									3 1/2
Per Do																									\$15.00



	No.	16	71	-	-F	o	r	20	ed	ı	S	t	ce	el		1	K	r	34	et	11	e	r	1	F	in	i	sh.	
Length,	Inc	hes	3										į.																6
Weight	Eac	h,	O	Z												-													3 1/2
Per Do	zen		- 4							r				4												. ,		,	\$17.00
			L	ON	(G		F	I	N	Ð	1	N	E	H	3	D	L	E	2	N	ic	)	S	Ø					



No. 1621—1	orged	Steel,	Kraeuter	Finish.	
Length, Inches					6
Weight Each, Oz					3 1/2
Per Dozen					\$18.00
CUI	EVED I	NEEDL	E NOSE		



	NO.	10	31	_	-1	00	1.	g٠	30	L	8	D	ee	ц,	J١	I	a	e	ut	e	r	1	4	n.	is	h.		
Length,	Incl	hes					,																				514	
Weight	Each	1.	Οz				٠.														1						3 1/2	
Per Do	zen										, ,					×	,										\$21.00	0
			EZE																									

#### DLE NOSE SIDE CUTTING



	No.	16	6	1-	-	F	o	r	ge	d	1	8	t	e	el	ı.	d	K	r	a	e	u	te		F	ì	n	i	sh.	
Length,	inc	he	8					2							ç		C													6
weight	Eac	h,	O	Z.						ı.																				3 1/2
Per Doz	en .						S						-				,								,					\$21.00
					Wa.			-	-	-	-					-														

#### DIAGONAL CUTTING



No. 2601—Forged Steel, Kraeuter Finish. Length, Inches ...... 4 1/2 5 51/2 Weight Each, Oz..... 2 1/2 3 1/2 \$15.00 16.50

These Pliers are made especially for close cutting. They are made from a special plier steel and finely fitted for exact work. The joint is made sturdy and long to obtain

All Above Pliers, One in a Box, Half Dozen Boxes in a Carton.

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#### COMBINATION PLIERS

W

#### KRAEUTER "GRIPTITE"



#### KRAEUTER "GRIPKUT"



No. 1973—Slip Joint, Nickel Plated, Side Cutters

For Mechanics, Electricians, Plumbers and Auto Repair Men. Has a small groove in nose for holding cotter pins and shoving them into place. Bolt head is depressed for working in close quarters.

 Length, Inches
 7

 Weight Each, Oz.
 9

 Per Dozen
 \$19.20

#### KRAEUTER BENT NOSE



No. 1923—Slip Joint, Nickel Plated, 25° Bent Jaws Particularly adapted for working in places that are difficult to reach and where it is necessary to work at an angle.

All Above, One in a Box; One-half Dozen in a Carton.

#### CRESCENT MOTOR KIT



Slip Joint, with Wire Cutter and Screw Driver

Drop Forged High Carbon Open Hearth Steel, Hardened and Oil Drawn, Bolt Turned from Solid Bar Cold Rolled Steel and Case Hardened, Drilled Holes, Checker Dot Knurled Handles, Nickel Plated, Hand Finished.

G210 G26 G28 Length, Inches.... 5 6 8 10 Capacity, Inches.... 34 1 1 14 1 36 10 16 5.00 7.20 10.00

#### CRESCENT CEE TEE CO



Slip Joint, with Wire Cutter and Screw Driver

Nos	H25	H26	H28	H210
Length, Inches		6	8	10
Weight Each, Oz		8	10	16
Per Dozen		3.35	5.00	7.50

#### CRESCENT UNIVERSAL



Slip Joint, Milled Teeth, with Screw Driver and Cutter Drop Forged High Carbon Open Hearth Steel, Hardened, Nickel Plated.

	A1	1	A	b	10	v	e,	0	n	e	ir	1	а	В	0	X						
Per Dozen																					٠	\$7.20
Weight Each, Oz																						
Length, Inches .																						
No																						
Nickel Plated.																						

#### CRESCENT THIN STRAIGHT NOSE



Slip Joint, Milled Teeth, with Cutter Drop Forged High Carbon Open Hearth Steel, Hardd Nickel Plated

ened, Nickel Flated.		
Nos	L25	L26
Length, Inches	5	6
Capacity, Inches	3/4	1
Weight Each, Oz	3	6
Per Dozen	\$5.75	5.75

#### CRESCENT THIN BENT NOSE



Slip Joint, Milled Teeth, with Cutter

Drop Forged High Carbon Open Hearth Steel Hardened and Oil Tempered, Bolt and Nut Turned from Solid Steel Bar and Hardened, Drilled Holes, Checker Dot Knurled Handles, Polished and Nickel Plated. Per Dozen

No. J26—6 in. Long, Capacity 1 in., for Work on Check Nuts, etc., Weight Per Dozen 5¼ Lbs... \$7.20 All Above, One in a Box.

#### UTICA REGULAR



No. 5000-Slip Joint

Forged Steel, Checkered Handles, Nickel Plated.

	Silve of the Control		
ength, Inches	5	6	8
Veight Dozen, Lbs	3	6	9
er Dozen	\$10.00	12.00	15.00

#### UTICA BENT NOSE



No. 5001-Slip Joint

Forged Steel, Checkered Handles, Nickel Plated.

Length Inches	6	8
mengen, inches		
Weight Dozen,	Lbs 6	9
	\$14.00	17.00

#### UTICA THIN NOSE



No. 10—Slip Joint Forged Steel, Checkered

#### UTICA FLUSH BOLT THIN NOSE



No. 500-Slip Joint

Forged Steel, Checkered Handles, Nickel Plated.

Length, Inches		***		+					+0	 		į.			 6 36
Weight Dozen	Lbs		 -					,			+			Ì.	9
Per Dozen								1						6	\$15.20

#### UTICA SIDE CUTTING



No. 503-Slip Joint

Forged Steel,		C	h	e	cl	k	er	e	ď	H	a	n	d	1	28	1	V	ic	1	5.6	9]		F	2]	a	ted.
Length, Inches								,	,	,			,								è				1	6 1/2
Weight Dozen, Lb	s																				4	ï	÷			7
Per Dozen																	1						ď		1	\$17.50

All Above, One in a Box; One-half Dozen in a Carton.

#### PLIERS

#### KLEIN LINEMENS "DIAMOND SPECIAL" SIDE CUTTING



 No. 201—For Use on Bare and Insulated Wire Forged Special Bar Steel, Carefully Tempered Black Handles, Polished Head.

 Length, Inches.
 6
 7
 8
 9

 Weight Each, Oz
 8
 12
 16
 17

 Per Dozen
 \$39.00
 46.50
 51.50
 62.00

#### KLEIN LONG NOSE SIDE CUTTING



#### KLEIN LONG NEEDLE NOSE



## KLEIN OBLIQUE CUTTING



For Electricians, Telephone and Switchboard Work Special Forged Steel, Tempered, Black Handles, Polished Head.

#### CRESCENT RADIO



#### PEXTO RADIO



One in a Box, One-half Dozen in a Carton.

#### PLIERS

#### PEXTO LINEMENS SIDE CUTTING



No. 500-Lap Joint

#### PEXTO "STAR RIVET" SIDE CUTTING



#### PEXTO INSULATED SIDE CUTTING



 No. 300—Box Joint

 Forged Steel, Insulated Handles, Polished Head.

 Length, Inches
 6
 7
 8

 Weight Each, Oz
 8
 12
 16

 Per Dozen
 \$50.60
 57.60
 64.50

#### PEXTO SIDE CUTTING



No. 240—Forged Steel, Black Finish, Polished Face Length, Inches... 4 5 6 7 8 Weight Each, Oz. 3 3½ 6½ 9 14 Per Dozen...... \$15.10 15.90 17.20 20.40 22.40 All Above One in a Box, One-half Dozen in a Carton.

#### PEXTO BURNER



#### PEXTO PIPE



No. 13-For Plumbers and Gas Fitters

 Drop Forged Steel, Well Tempered, Finely Polished Jaws, Full Polished.
 8
 10
 12
 14

 Length, Inches
 8
 10
 12
 14

 Weight Each, Oz.
 10
 15
 16
 22

 Per Dozen
 \$10.80
 13.40
 15.30
 18.80

 One-half Dozen in a Box.

# PLIERS

# BERNARD SIDE CUTTING



#### No. 102—Parallel Jaws

Crucible Steel, Open Throat, Closed-in Handles, Full Nickel Plated.

. . . . 4 32 Length, Inches . . . . . 5 16 One-half Dozen in a Box.

# BERNARD FLAT NOSE



#### No. 100-Parallel Jaws

Crucible Steel, Full Nickel Plated, Open Throat, Closedin Handles, Knurled Grips.

536 Length, Inches ..... Weight Per Dozen, Lbs.. 3 4 % Per Dozen ...... \$10.00 13.00 6 1/4 1236 16.00 24.00 One-half Dozen in a Box.

## BERNARD ROUND NOSE



# No. 101-Parallel Jaws

Crucible Steel, Full Nickel Plated, Open Throat, Closedin Handles, Knurled Grips.

6 14 Weight Per Dozen, Lbs..... Per Dozen ..... \$16.00 One-half Dozen in a Box.

## BERNARD BELT PUNCH



#### No. 120-Parallel Jaws

Crucible Steel, Full Nickel Plated, Open Throat, Closedin Handles, Knurled Grips.

Length, Inches 5 % Weight Per Dozen, Lbs..... 

Cuts and pierces round belting and useful for clamping or removing belt hooks.

#### One-half Dozen in a Box.



#### No. 450-Forged Steel

Black Handles. Polished Jaws, will grasp the glass by the full width of jaw. Per Dozen No. 450-8 in, Long, Weight Per Dozen 12 Lbs.... \$21.00 One-half Dozen in a Box.

# PLIER DISPLAY BOARDS

CRESCENT PLIER DISPLAY



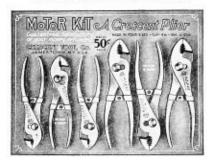
#### Mounted on Easel Back Card

Assortment consists of ½ dozen No. L25, 5 in. Thin Straight Nose Pliers and ½ dozen No. L26, 6 in. Thin Straight Nose Pliers, together with Display Card.

The 5 in, are mounted on Card, the 6 in, are regular Cartons in the Package.

No. DB7 Display-Consisting of 1 Dozen Pliers with Display Board 8 1/2 x11 in., Weight 4 Lbs......\$6.00

#### MOTOR KIT PLIER DISPLAY



#### Mounted on Easel Back Card

Assortment Consists of 1/2 dozen Nos. G25, 5 in. and G26, 6 in., Motor Kit Pliers, Three of Each Size are mounted on Display Board as shown above. The other Three of Each Size are packed in Individual Cartons. Display Card is equipped with Lock and Easel Back.

No. DB8 Display-Consisting of 1 Dozen Pliers with Display Board 8 ½ x11 in., Weight 5 ¼ Lbs..... \$6.00 One Display in a Box. These assortments are furnished at the regular price

of the pliers with no charge for the display.

# PLIER AND WRENCH KIT

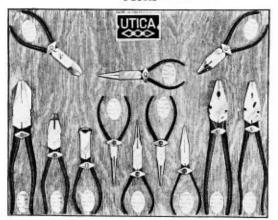


# Convenient for Automobiles or Home

Outfit consists of 6 in. Crescent Thin Nose Plier, 8 in. Crescent Adjustable Wrench and 4 in. Crescent Combination Hammer-Screwdriver.

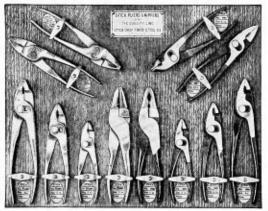
No. TK31-In Stout Brown Duck Roll, Weight 1% One Set in a Box.

# PLIER DISPLAY BOARDS



This Board is finished in golden oak, has an easel back, and tags to match the Board, giving the Plier number and size with space to insert the price.

Per Assortment



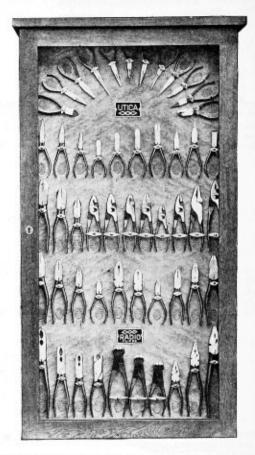
This Board is finished in golden oak with easel back and tags to match the board, giving the plier number with space for price. Per Assortment

No. 2 Assortment—Consists of 12 Combination Pliers in Utica Finish and Nickel Plated, One Each No. 5000, 5, 6 and 8 in.; No. 6000, 7 in.; No. 4000, 7 in.; No. 500, 6 ½ in.; No. 502, 6 ½ in. and No. 5001, 6 in., Mounted on Board. \$13.00

One Assortment in a Box



# UTICA WALL DISPLAY CASE



Containing the assortment of live, fast-selling Pliers. This case hung in a prominent place in your store, will make sales while you are waiting on your customers.

Nos.		Nos.		Nos.	
3400-61/2	in.	60-6	in.	325 5	in.
$777 - 5 \frac{1}{2}$	in.	5000-8	in.	1050 5	in.
888-51/2	in.	5000-6	in.	1050-6	in.
024 - 5	in.	5000-5	in.	1050 7	in.
650-51/2	in.	5001-6	in.	1050- 8	in.
103351/2	in.	500-616	in.	1950-8	in.
32-5 1/2	in.	502-6	in.	1950 7	in.
11-5 1/2	in.	1-7	in.	1950 6	in.
65-5	in.	503-646	in.	50 5	in.
42-4	in.	20-5	in.	50 6	in.
42-5	in.	20-6	in.	50- 7	in.
42-5 16	in.	21-5 1/2	in.	50 8	
42-6	in.	22-5	in.		in.
708-6	in.	22-6	in.	1000-10	in.
708-7	in.	654-514		1000-8	in.
6000-7	in.		in.	1000 6	in.
		6556	in.	1300 7	in.
60-8	in.	40-7	in.	1300 8	in.
60-7	in.	41-5	in.	1300-10	in.

Description of Case—Height 46 in., width 24 in. Made of golden oak with yellow birch sample boards. Heavy glass door, fitted with Corbin locks. This case remains the property of the Utica Drop Forge and Tool Co., and is loaned for the display of Utica Pliers only and is subject to removal when used for any other purpose.

# CUTTING NIPPERS



No. 125—Compound Leverage

Crucible Steel, Full Nickel Plated, Open Throat, Equipped with Spring for Opening Jaws. Length, Inches ..... 5 Weight Per Dozen, Lbs.... 5 1/8 Per Dozen ..... \$27.00 11% 30.00 36.00 One-half Dozen in a Box.

#### UTICA JEWELERS



#### No. 65-Box Joint

Forged Steel, Checkered Handles, Blue Gun Metal Finish. 

 Length, Inches
 4
 4 ½

 Weight Per Dozen, Lbs
 2 ¾
 3 ½

 Per Dozen
 \$15.25
 15.75

 3 34 15.75 16.30 One in a Box, One-half Dozen in a Carton.

#### UTICA BULL DOG



#### No. 60-Lap Joint

Forged Steel, Checkered Handles, Blue Gun Metal Finish. 6 

 Length, Inches.
 5

 Weight Dozen, Lbs.
 5 %

 Per Dozen
 \$12.30

 8 7 34 121/4 13.70 16.10 18.90 One in a Box, One-half Dozen in a Carton.

#### UTICA COMPOUND



# No. 3-With Compound Leverage

Forged Steel, Checkered Handles, Blue Gun Metal Finish. 516 736 12 76 2214 30.85 37.45 One in a Box, One-half Dozen in a Carton.

# STARRETT TILE CUT

# No. 235—Drop Forged Steel Head and Handle

Finely Finished, Tempered High Grade Steel Jaws, Case Hardened Parts.



Length, Inches ..... 514 Each ...... \$3.50

The frames of these Nippers are cut out to allow the jaws to be adjusted for wide opening, thus fitting them to be used in cutting tile, otherwise same as No. 1 described

#### One in a Box.

# CUTTING NIPPERS STARRETT ADJUSTABLE



"B" Jaw-For Bicycle use.

Music Wire. "C" Jaw --- For Common Use.

Drop Forged Steel, Head and Handles

Finely Finished, Tempered High Grade Steel Jaws, Case Hardened Parts. Removable Jaws can be ground and adjusted when they become worn. No. 1M-5 1/2 in. Long, Opens 1/8 in., with "M" Jaws for Music Wire... No. 1C-5½ in. Long, Opens ½ in., with "C" Jaws Extra Jaws—M, C or B......Per Pair, .60 Extra Jaw Screws .......Per Dozen, .30 .30 One in a Box.

#### CAREW



Adjustable Tempered Tool Steel Jaws Forged Steel Handles, Polished Jaws,

Nos	8	10	12	14
Length, Inches		10	12	14
Weight Each, Lbs	1 1/2	2	3	4
Each	\$5.20	5.70	6.60	8.00
Extra CuttersPer Pair,	1.50	1.60	1.70	1.80

# TODD IMPROVED



Forged Steel Cutters, Black Finished Handles Removable Jaws, Fastened with Two Screws.

Nos	1	3	4	6
Length, Inches	12	10	8	6
Weight Each, Lbs	2 1/4	1 1/2	1	7/8
Each	\$3.35	2.65	2.25	2.00
Extra Cutters Per Pair,		. 90	. 75	. 70
그렇게 하지 않아 보다되어요 하다 하나 하다 이 작가 있다면 되었다.				

# HELLER FARRIERS



Crucible Tool Steel, Full Polished ...... 24A 24 12 14 Length, Inches ..... 28 Weight Per Dozen, Lbs..... 20 40.00 Per Dozen ..... \$33.50 One-half Dozen in a Box.

# CARPENTERS PINCERS



No. 70-Hammer Head Pattern

Forged Steel, Polished	Face,	with	Claw and	Screw
Driver Ends.				
Length, Inches	6	7	8	10
Weight Each, Oz	5	6 1/2	10	15 1/2
Per Dozen	87.20	9.00	9.90	12.60
One-half D		a Box		

# FARRIERS PINCERS



No. 12—12 in. Long, Weight Per Dozen 22 Lbs....\$12.50 One in a Box.



Crucible Tool Steel, Oil Finish, Polished Jaws.

No. 20—14 in. Long, Weight Per Dozen 35 Lbs...\$33.50 One-quarter Dozen in a Box.



Crucible Tool Steel, Oil Finish, Polished Jaws.

Per Dozen

No. 21—12 in. Long, Weight Per Dozen 23 Lbs....\$25.00

One-half Dozen in a Box.

# HOOF PARERS



| Special Refined Crucible Tool Steel. | Nos. | 23A | 23 | Length, Inches | 12 | 14 | Weight Per Dozen, Lbs | 20 | 28 | Per Dozen | \$33.50 | 40.00 | One-half Dozen in a Box.

# BLACKSMITHS TONGS STRAIGHT LIP



Extra Refined Drop Forged Steel, Tempered.

Length, Inches . . . 16 18 20 22 24

Weight Dozen, Lbs. 21 24 30 33 36

Per Dozen . . . . \$9.60 10.00 10.60 11.25 13.00

CURVED LIP BOLT



Extra Refined Drop Forged Steel, Tempered. Size, Inches ...... 38 34 14 98 Length, Inches .... 20 20 22 22 27 Weight Per Dozen, Lbs.. 24 33 35 Per Dozen ..... \$11.60 12.00 14.25 15.00

GAD



Extra Refined Drop Forged Steel, Tempered.
Per Dozen
No. 22—22 in. Long, Weight Per Dozen 39 Lbs...\$14.50

# BOLT CLIPPERS

PORTER 1855 STYLE



Tool Steel Jaws, Japanned Malleable Iron Handles.

#### PORTER NEW EASY



High Grade Tool Steel Jaws.

Japanned Malleable Iron Handles with Rubber Buffers, Set Screw Adjustment.

Nos	0	1	2	3
Length, Inches	18	24 1/2	3.0	36
Cuts Bolts, Inches	Va.	3/8	1/2	56
Weight Each, Lbs	3	5 %	9	13
Each	\$3.75	5.00	7.00	9.00
Extra Jaws Per Pair,	1.35	1.65	2.35	3.00
Six in a	Box.			

# HYPOWA ANGULAR



For End or Side Cutting.

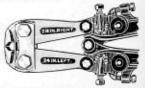
Tool Steel Jaws, Japanned Malleable Iron Handles with Rubber Buffers.

Cuts with ease in positions where neither the regular side or end cutter can be used. Each

# HYPOWA END CUTTING

# Tool Steel Jaws.

Japanned Malleable Iron Handles with Rubber Bumpers. So constructed as to practically eliminate all danger of springing or breaking cutting jaws on work within the capacity of



the tool. Cutting power increases at end of cut. Jaws cannot choke.

# CHAIN CUTTERS

#### PORTER



For Hardened Chain.

Tool Steel Jaws, Japanned Malleable Iron Handles.

Extra Jaws .... Per Pair, 2.40

Six in a Box.

# LINEMENS SPLICING CLAMPS

KLEIN COMBINATION



For Wire and Sleeves

Hammer Forged, High Grade Crucible Tool Steel, Spring Tempered, Polished Head, Black Handles.

No. 132-12-9 in. Long, Round Holes for Copper Wire Nos. 6, 8, 10 and 12 B. & S. Gauge and Iron Wire Nos. 8, 10, 12 and 14 B. W. Gauge, Reverse Side has 4 Double Chambers for Copper Sleeves Nos. 8, 10, 12, 14 and 17 B, & S. Gauge, for Iron Sleeves Nos. 10, 12, 14, 16 and 19 B. 

One in a Carton, Six Cartons in a Box.



For Wire and Sleeves

Hammer Forged, High Grade Crucible Tool Steel, Spring Tempered, Polished Head, Black Handles. Each

No. 132-15-11 1/4 in. Long, 5 Holes for Bare Wire, One Oval Hole for Guy Strand, Reverse Side has Four Double Chambers for Copper Sleeves Nos. 6, 8, 10, 12, 14 and 17 B. & S. Gauge, and Iron Sleeves Nos. 8, 10, 12, 14, 16 and 19 B. W. Gauge, Oval Hole .467x.624, Weight Each 21 Oz.86.75 One in a Carton, Six Cartons in a Box.

## RED DEVIL COMBINATION



For Wire and Sleeves

Forged Steel, Polished Head, Gun Metal Finish Handles. File Cut Jaws.

No. 424-9 in. Long, for Nos. 8, 10, 12 and 14 Iron Wire, Nos. 6, 8, 10 and 12 Copper Wire, 10, 12 and 14 McIntyre Sleeves, Weight Each 14 Oz . . \$4.15 One in a Carton, Six Cartons in a Box.



For Wire and Sleeves

Forged Steel, Polished Head, Gun Metal Finish Handles, File Cut Jaws.

No. 417-10 % in. Long, for Nos. 6, 8, 10, 12 and 14 Iron Wire, Nos. 4, 6, 8, 10 and 12 Copper Wire, Nos. 8, 10, 12 and 14 McIntyre Sleeves, Weight Each 20 Oz......\$4.40 One in a Carton, Six Cartons in a Box.

# LAG SCREW WRENCHES



For Linemens Use

Forged Tool Steel, Rust Proof Finish. Each No. 275-For Hexagon and Square Nuts, it to % in. by 16ths and Lag Screws and Nuts from 14 to This Wrench has the largest range of work of any of

similar construction. Six in a Package.

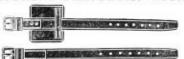
# LINEMENS CLIMBERS



No. 1901—Punched Strap Loops

Forged Steel, One Piece, without Straps. Length, Inches . . . . . . 15 15 1/2 16 16 1/2 17 Weight Per Pair, Lbs. . 3 34 3.% 3 1/2 3 56 85.25 5.25 5.25 5.25 Per Pair ..... 5.25 One Pair in a Carton.

# LINEMENS CLIMBER STRAPS



No. 5301-1 Set-For Eastern Climbers, Set Consists of Two Upper Straps with 4x4 in. Plain Leather Pads and Two Lower Straps, Made of Select Oak Tanned Harness Leather, Extra Heavy Roller Buckles, Both Heel and Calf Straps are 22 in. Long Over All and 11/4 in. Wide, Weight Per Set 

# LINEMENS TOOL BELTS



Oak Tanned Harness Leather

Cushion 2 1/2 wide carries the dee rings. The outer or loop layer is 1 1/2 in. wide, formed into tool loops by riveting to cushion. Furnished with drop forged buckle tested to 1200 pounds.

DROP FORGED DEE RINGS AND BUCKLE

No. 5202-2 1/4 in. Wide, 38, 40, 42, 44 and 46 in. Open Stock.

Note-Always State Length Belt Wanted.

# LINEMENS SAFETY STRAPS

Selected Harness Leather

riveted and double reinforced.



Each No. 5250-Standard Type, 6 ft. Long, 1% in. Wide, Japanned Imperial Snaps, Weight Each 2 1/2 Lbs.83.50

# IMPROVED HAVEN CLAMPS RED DEVIL

Rust-Proof Finish



Drop Forged Steel, Forged Unbreakable Loop. Each No. 368-For No. 8 Wire and Smaller, Wt. Each and Smaller, Wt. Each . . 5.45

BUFFALO GRIPS 23/2 Lbs. . . . . . . . RED DEVIL

With Automatic Lock Forged Steel, White Nickel Each Finish. No. 471-For No. 6 Wire and Smaller, Wt. Ea. 1 1/2 Lbs.\$5.15 No. 472-For No. 0 Wire and Smaller, Wt. Ea. 2 Lbs. . . 8 . 25 No. 473-For 4/0 Wire and

One in a Box.

Smaller, Wt. Ea. 6 Lbs. . 12.35

# WRENCHES

## COES GENUINE KNIFE HANDLE



#### Black Finish

Forged Steel Head and Bar, Hardwood Handle, Riveted Under Pressure

CHUCK E COSMIC.				
Length, Inches	6	8	10	12
Open, Inches	3.5	1 %	1 %	2 1/4
Weight Dozen, Lbs	9	15	26	40 1/2
Per Dozen		18.00	22.00	28.00
Length, Inches		15	18	21
Open, Inches			3 1/8	3 11
Weight Dozen, Lbs		5.8	79	107
Per Dozen		\$38.00	48.00	58.00
6 to 10 to Oue bald De	15	40 1-	One think	Dance

6 to 12 in., One-half Dozen; 15 and 18 in., One-third Dozen; 21 in., One-twelfth Dozen in a Package.

# COES STEEL HANDLE



#### Black Finish

Hardened Special Steel Bar, Jaws and One-piece Screw, Steel Handle. 12 in. and Larger have Ball Bearing Screw. Length, Inches ..... Opens, Inches ..... 1 34 214 1 % Weight Dozen, Lbs... 1.6 28 44 Per Dozen . . . . . . . . . . . \$15.00 18.00 22.00 28.00 Length, Inches ..... 15 18 21 Opens, Inches ..... 2 1/2 218 4 1/8 Weight Dozen, Lbs..... 64 125 89 Per Dozen ..... \$38.00 48.00 58.00

6 to 12 in., One-half Dozen; 15 and 18 in., One-third Dozen; 21 in., One-twelfth Dozen in a Package.

# COES KEY MODEL



Forged Steel, Hardened and Tested, Self-Contained Key cannot come off

current come on,		
Length, Inches	28	36
Opens, Inches	5 %	6 1/4
Takes Pipe Union, Inches	4	5
Weight Each, Lbs	19	27
Each	\$18.00	38.00

# BEMIS & CALL KNIFE HANDLE



# No. 62-Black Finish

Forged Steel Bar and Head, Malleable Iron Frame. Hardwood Handles, Riveted Over Countersunk Washers to prevent splitting.

Length, Inches	6.	8	10	12
Opens, Inches		1 34	1 34	2 1/4
Weight Dozen, Lbs	9	16	25	4.0
Per Dozen	\$15.00	18.00	22.00	28.00
Length, Inches		15	18	21
Opens, Inches		2 %	3 1/8	4
Weight Dozen, Lbs		53	8.0	105
Per Dozen		\$38.00	48.00	58.00
6 to 12 in One half De	mont 15 k	m.4 4 0 in	Own Alexander	· Ph

6 to 12 in., One-half Dozen; 15 and 18 in., One-third Dozen; 21 in., One-twelfth Dozen in a Package.

# WRENCHES

#### TRIMO KNIFE HANDLE



# With Patent Nut Guards

The Stationary Handle and Jaw are Drop Forged from One-piece High Grade Steel. Hardwood Grips securely attached to Handle.

Length, Inches	6	8	10	12
Opens, Inches		1 %	1 34	2 1/4
Weight Each, Lbs	1/2	1 1/4	1 1/8	3 1/4
Per Dozen	\$15.00	18.00	22.00	28.00
Length, Inches		15	18	21
Opens, Inches		2 5%	3 1/4	4 14
Weight Each, Lbs		5	7	9 14
Per Dozen		\$38.00	48.00	58.00
	Six in a	Box.		

## BEMIS & CALL SHORT NUT



## No. 37-Merrick Pattern

One-piece Forged Steel Head, Bar and Shank, Black Finish, Hardwood Handle.

Length, Inches	8	10	12	15	18
Opens, Inches	1 1/2	1 %	2 1/4	2 3/4	4
Weight Dozen, Lbs	13	19	30	45	66
Per Dozen	\$18.00	22.00	28.00	38.00	48.00
One-Ha	alf Dozen	n in a	Box.		

#### BEMIS & CALL LONG NUT



One-piece Forged Steel Head, Bar and Shank, Black Finish, Hardwood Handle.

Length, Inches	8	10	12	15	18
Opens, Inches	1 %	2 1/4	2 1/4	2.34	4
Weight Dozen, Lbs	14	20	32	4.8	68
Per Dozen	\$18.00	22.00	28.00	38.00	48.00
One-ha	lf Dozen	in a	Box.		

#### AGRICULTURAL



# Black Finish

Forged Steel Head, Bar and Shank, Steel Screw, Hardwood Handle

Length, Inches	6	8	10	12	15
Open, Inches	7/8	1 /	1 %	1 %	2 1/8
Weight Dozen, Lbs	9	14	20	28	4.0
Per Dozen	\$10.00	12.00	14.00	18.00	24.00
One-half	Dozen i	n a Pa	ckage.		

#### CRESCENT AUTO



# Polished Finish

Forged Steel, Tempered. Spring under Adjusting Nut holds the Setting of the wrench after it has been adjusted. 019 0111 Length, Inches ...... 11 Open, Inches .....

One in a Box.

Weight Each, Oz.....

Per Dozen ......

2 %

24 1/2

15.00

3

14

\$9.00

# WRENCHES

#### BRIDGE BUILDERS



	Lgth.	Size of Ope	ning, Inches	App.	With	Extra
Nos.	Han- dle, Ft.	Square	Hexagon	Wt., Lbs.	1 Gear, Each	Gear, Each
1	3	1, 1%, 1%, 1%, 1%	$1\frac{1}{16}$ , $1\frac{1}{4}$ , $1\frac{7}{16}$ , $1\frac{5}{8}$	11	\$14.00	\$2.00
2	3		118, 2, 23, 236	14	16.00	4.00
3	3	2, 2 1/4, 2 1/8, 2 1/4	2 3/8 , 2 1/6 , 2 3/4 , 2 1/8 , 3 3/8	23	24.00	6.00
4	3 1/2	2 1/2, 2 3/4, 3, 3 1/4	3 ½, 3 %	32	9	*
5	3 1/2	3 1/4 , 3 1/2 , 3 3/4	4 1/4 , 4 5/8	40		

\*These sizes made to order. Prices on application.

## LOWELL RATCHET



This wrench can be changed to a right or left hand motion at pleasure by rotating the knurled nut at the end of the handle.

	Lgth. Han-	Size of Opening	ng, Inches	With	Extra
Nos.	dle, Inches	Square	Hexagon	1 Gear, Each	Gear, Each
0	7	14. %, 1/2	16. 18	\$ 5.00	\$1.00
1	10	% taper, 3/8, 1/2,	12. 14. 55		
		5/8		6.00	1.00
2	12		12, 32, 76, 31	7.00	1.25
3	15	56, 11, 34, 12, 76,		0.00	
3 14	18	\$1, 1, 14, 1% \$6, 16, \$4, 18, %.	11/4	9.00	1.50
	1	11. 1. 1½, 1½	14	10.00	1.50
4	18	1, 1%, 14, 1%,	14, 14, 14,		
		17, 11/2	1%, 1}}	12.00	2.00
4 1/2	24	1, 1%, 1%, 1%,			
	56665	$1\frac{1}{16}$ , $1\frac{1}{2}$	1 % , 1 18	14.00	2.00

#### BILLINGS & SPENCER AUTO



Duro Black Rust Proof Finish

Drop Forged Steel, Specially Heat Treated.

Nos	1	2	3	4	5	6
Length, Inches		- 8	10%	121/4	14%	18 14
Open, Inches	1 %	1 %	25	2 34	3	376
Thickness Jaw, Inches	15	3%	16	70	16	34
Depth Jaw, Inches	1	1 1/4	1 1/2	1 1/2	1 34	2 1/8
Weight Each, Lbs	11	132	1 34	2	3 34	6 1/2
Each	81.15	1.50	1.90	2.40	3.00	4.00
0	ne in	a Box	Χ.			

# MOSSBERG AUTO



Forged Steel, Hardened, with Tempered Jaws.

Nos	K7	K9	K11
Length, Inches	7	9	11
Opens, Inches	1 %	1 %	2 1/2
	3/8	1/2	1/2
Weight Each, Oz		13 14	22
Each !		1.10	1.35
One in			

# WRENCHES

## BILLINGS & SPENCER BICYCLE



# Nickel Plated

Drop Forged Steel, Hardened Jaws, Telescoping Handle.

#### STERLING BICYCLE

#### Satin Finish

Forged Steel, Nicely Finished.



#### BEMIS & CALL ADJUSTABLE "S" NUT



#### No. 48—Japanned Handie, Polished Head

Drop Forged Steel Sliding Jaw, Steel Operating Nut, Carefully Hardened and Tempered Parts.

Length, Inches		8	10	12
Opens, Inches		1	1 %	1 %
Weight Dozen, Lbs	5 1/2	12	22	33
Per Dozen	. \$8.00	10.00	12.00	18.00
One-half	Dozen in	a Box		

# ROBINSON ADJUSTABLE "S"

## Drop Forged Steel

Sliding Jaw, Steel Operating Nut, Carefully Hardened and Tempered Parts, Dull Black Handle; Full Polished Head.



Nos	6R	SR	10R
Length, Inches	6	8	10
Jaws Open, Inches	3/4	1	1 3%
Weight Per Dozen, Lbs	4	12	20
Per Dozen	\$12.00	15.00	20.00
One-half D	ozen in a	Box	

# WESTCOTT ADJUSTABLE "S"



# For Nuts

Malleable Iron Handle, Forged Steel Jaws, Japanned.

Nos	74	76	78	80	82	84
Length, Inches	4	6	8	10	12	14
Opens, Inches	120	34	1	1 %	1.5%	2
Wt. Dozen, Lbs	2	5.34	11	19 1/2	33	51
Per Dozen	\$8.00	8.00	10.00	12.00	18.00	24.00
O	ne-half	Dozen	in a	Roy		

# BEMIS & CALL ADJUSTABLE "S" PIPE

## No. 50-For Pipe

Malleable Iron Handles, Forged Tool Steel Jaws.



Jaws.	-		
Length, Inches	6	8	10
Takes Pipe, Inches		1/8 to 3/4	1/8 to 1
Weight Dozen, Lbs		13	23
Per Dozen	\$8.00	10.00	12.00
One-half	Dozen in a	Box.	

# WRENCHES CRESCENT ADJUSTABLE



Forged from Special Heat Treated Alloy Steel Hardened, Carbonized and Oil Tempered, Polished Jaws,

Head and Raised Edges.				
Nos	A14	A16	A18	A110
Length, Inches	4	6	8	10
Capacity, Inches	1/2	34	18	1 1/8
Weight Per Dozen, Lbs.	1 1/2	3 %	7 1/2	14
Per Dozen	89.35	9.35	11.50	14.40
Nos		A112	A115	A118
Length, Inches		12	15	1.8
Capacity, Inches		1 %	1 11	2 15
Weight Per Dozen, Lbs		24	5.2	8.4
Per Dozen		\$21.60	32.40	46.80
On	e in a E	Box.		

#### CRESCENT DOUBLE-END ADJUSTABLE



Forged from Special Heat Treated Alloy Steel Hardened, Carbonized and Oil Tempered, Polished Jaws,

Head and Raised	Edges.			
Nos	B146	B168	B1810	B11012
Size, Inches	4 to 6	6 to 8	8 to 10	10 to 12
Capacity, Inches	1/2 to 3/4	% to 15	15 to 1 1/8	1 1/2 to 1/4
Wt. Doz., Lbs	4 1/2	8 1/4	14 1/4	27
Per Dozen	815.85	18.00	21.60	28.80
	One i	n a Box.		

# PARTS FOR CRESCENT ADJUSTABLE WRENCHES



No. 2. No. 3. No. 5. No. 4.

These Parts Fit Either Single or	Double	. End	Ween	ohoe
For Wrench, Inches				10
No. 2—Jaw Per Dozen,				
Weight Per Dozen, Lbs		1	2	3
No. 3-Thumb Nut Per Dozen,	\$1.20	1.20	1.44	1.80
Weight Per Dozen, Oz	1	2	4	6
No. 4-Pin Per Dozen,	\$0.60	. 60	.60	. 60
Weight Per Dozen, Oz	1/2	3/3	1	2
No. 5-Spring Per Dozen,	\$0.60	.60	.60	.60
Weight Per Dozen, Oz	1/4	1/4	ra	3%
For Wrench, Inches	12	1	5	18
No. 2-Jaw Per Dozen,	87.20	10	20	13.80
Weight Per Dozen, Lbs	4 1/2	1	1	18
No. 3-Thumb Nut Per Dozen,	\$3.00	4.	20	6.60
Weight Per Dozen, Lbs	16	1	34	2 1/4
No. 4-Pin Per Dozen,	\$1.20	1.	20	1.20
Weight Per Dozen, Oz	4		3	14
No. 5-Spring Per Dozen,	\$0.60		30	.60
Weight Per Dozen, Oz	3/8		6	5%

# CARLL ADJUSTABLE



Jaws Reversible for Either Nuts or Pipe Drop Forged Steel, Hardened and Tempered

Drop Forged Steel	, mardened	and Tempered.	
Nos	60	80	100
Length, Inches	6	8	10
Jaws Open, Inches	1 1/4	1 1/2	1 %
Weight Each, Oz	6	15	22
Per Dozen	\$10.00	12.00	15.00
One-half	Dozen in a	Box.	

# PIPE WRENCHES

B. & C. COMBINATION PIPE AND NUT



No. 45-Long Nut, Polished

Forged One-Piece Solid Steel Head, Bar and Shank, Hardwood Handle.

Length, Inches . 10 12 Takes Pipe, In., ¼ to ¾ % to 1 % 1/2 to 2 1/4 14 to 1 1/2 to 3 16 Wt. Dozen, Lbs. 25 38 5.5 84 Per Dozen .... \$27.00 30.00 36.00 48.00 87.00

The long nut affords better grip for hand and can be adjusted in cold weather without removing glove or mitten. It also protects the threads and prevents it from being damaged.

One-half Dozen in a Box.

#### WARNOCK TRIPLE WEAR



For Smooth Pipe

For Plumbers, Engineers and Machinists Use, Flexible Woven Strap, Drop Forged Steel Shackles, Curved Nose, Won't Crush Pipe, Double Strap where Wear is Greatest, Unbreakable Handle, Enameled Finish.

 Nos.
 12
 18

 Takes Pipe, Inches
 ½ to 2
 1 to 5

 Length, Inches
 12
 18

 Each
 \$2.50
 5.00

 Extra Straps
 Each
 .50
 1.00

Two added holes gives this Wrench three wearing positions for each strap. One in a Box.

## VICTOR ADJUSTABLE



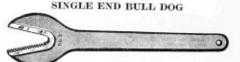
With Interchangeable Jaw

Drop Forged Tool Steel, Nickel Plated. Per Dozen No. 365—7 in. Long, Weight Per Dozen 9 Lbs....\$18.00 One in a Box.

## BULL DOG



Six in a Box.



Drop Forged High Carbon Steel, Oil Tempered

Nos	2	216	3
Length, Inches	9	12 1/6	16
Holds Pipe, Inches Holds Round Iron, In	% to %	% to 1 % to 1 %	1/2 to 1 1/4 3/4 to 1 3/4
Weight Per Dozen, Lbs.	12	24	3614
Each	\$1.00	1.50	2.00
On	en Stock		

# PIPE WRENCHES

# GENUINE STILLSON WOOD HANDLE



No. 100—Drop Forged Steel.

Polished Jaw and Frame, Tested Steel Springs.

Length, Inches	6	8	10	14
Takes Pipe, Inches 1/8	to ½	1/8 to 3/4	1/8 to 1	14 to 1 1/2
Weight Each, Lbs	3/8	11	1 1/2	2 %
Each \$	2.00	2.25	2.50	3.50
S	ix in a	Box.		

#### GENUINE STILLSON STEEL HANDLE



No. 200—Drop Forged Steel.

Polished Jaw and Frame, Tested Steel Springs.

Length, Inches	8	10	14	18
Takes Pipe, Inches		1/8 to 1	1/4 to 1 1/2	34 to 2
Weight Each, Lbs	3/4	1 3/2	2 %	4 14
Each	\$2.25	2.50	3.50	5.00
Length, Inches		24	36	48
Takes Pipe, Inches	1	4 to 2 1/2	36 to 3 36	1 to 5
Weight Each, Lbs		734	15	24
Each		\$7.25	13.50	20.00
8 to 24 in., Six in a	Box: 36	and 48	in., Open	Stock.

# AUTOMOBILE STILLSON

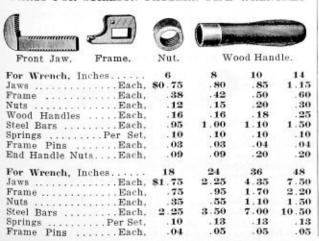


No. 300-Drop Forged Steel.

Extra Thin Jaw, Polished Jaw and Frame, Tested Steel Springs.

Length, Inches	8	10
Takes Pipe, Inches	. 1/8 to 3/4	1/8 to 1
Weight Each, Lbs	11	1 1/2
Each	\$2.25	2.50
Siv in a Ro	VV.	

# PARTS FOR STILLSON PATTERN PIPE WRENCHES



# PIPE WRENCHES

#### TRIMO STEEL HANDLE







Drop Forged from Selected Bar Steel.

Equipped with Steel Nut Guards which Prevent Accidental Rotation of the Adjustable Nut while in Use.

Movable Jaw and Nut made with Round Top and Bottom Threads Guaranteed not to Strip or Burr.

Length Open, Inches. 6	8	10	14
Takes Pipe, Inches 1/8 to 1/2	1/4 to 3/4	1/4 to 1	% to 1 %
Weight Each, Lbs 1/2	3/4	1 1/6	3
Each	2.25	2.50	3.50
Length Open, Inches. 18	24	36	48
Takes Pipe, Inches ¼ to 2	34 to 2 %	16 to 3 16	1 to 5
Weight Each, Lbs 5	8 1/2	16%	24
Each	7.25	13.50	20.00

6 to 24 in., Six in a Box; 36 and 48 in., Open Stock.

#### TRIMO WOOD HANDLE



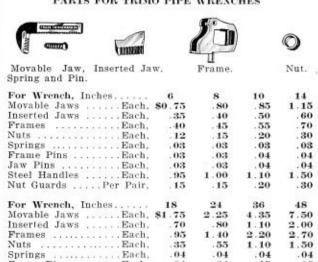
Ebony Finished Hardwood Handle.

Steel Frame and Jaws, Polished Head with Steel Nut Guards Preventing Accidental Rotation of Adjusting Nut in Close-quarter Work.

Length, Inches	6	8	10	14
Takes Pipe, Inches	1/8 to 1/2	36 to 34	1/s to 1	14 to 1 1/2
Weight Each, Lbs	1/2	3/4	1 1/2	3
Each	\$2.00	2.25	2.50	3.50

Six in a Box.

#### PARTS FOR TRIMO PIPE WRENCHES



.04

.04

2.25

.05

.05

. 55

7.00

.04

0.4

3.50

. 45

.05

.05

.65

10.50

Frame Pins . . . . . Each,

Jaw Pins ..... Each,

Steel Handles . . . . . Each,

Nut Guards .... Per Pair,

# PIPE WRENCHES

#### LITTLE GIANT





Showing Different Ways of Engaging Jaws.

14 to 24 in. Sizes.

# Drop Forged Steel, Heat Treated and Tempered

Practically indestructible, powerful and easy to handle. Can be put straight to a pipe like a pair of pliers and will reach corners and cramped positions ordinarily out of reach.

They have only three parts, there is nothing to break, no clumsy frame, no nuts, pins or springs. This new design makes it possible to reach pipe, rods, nuts, etc., in ordinary inaccessible places.

There are double sets of teeth on the 8 and 10 in. sizes and quadruple sets on the 14 in. size, increasing the life of the "Little Giant" two and four times.

Size, Inches	8	10	14	18	24
Takes Pipe, Inches		1	1 1/2	2	2 1/2
Weight Each, Lbs	13	1 1/4	2 1/2	4 %	7 70
Each	82.25	2.50	3.50	5.00	7.25

Six in a Box.

# CHAIN PIPE WRENCHES

BILLINGS & SPENCER



The pipe may be turned in either direction instantly without removing the wrench or loosening the chain.

It can be instantly converted to a fitting wrench by simply removing outer jaws.

The Jaws are double ended and reversible, doubling the life of the wrench.

Handle and Jaws Drop Forged from Special Open Hearth Steel, and Heat Treated. Handles have natural Oil Finish, Jaws have "Duro" Black Rust-proof Finish with Red-painted Panels,

Nos	14	20	27
Trade Nos	30	31	32
Takes Pipe, Inches	1/4 to 3/4	1/4 to 1 1/2	14 to 2 16
Length, Inches	14	20	27
Length Chain, Inches	8	121/2	16 1/2
Breaking Strain, Lbs	3600	6700	9800
Weight Each, Lbs	3	6	1036
Each	\$5.00	7.00	10.00
Nos	37	47	57
Trade Nos	33	331/2	3.4
Takes Pipe, Inches	34 to 4	1 to 6	1 1/2 to 8
Length, Inches	3.7	47	5.7
Length Chain, Inches	20 %	30 14	41
Breaking Strain, Lbs	12500	14300	15700
Weight Each, Lbs	19	28	42
Each	\$14.00	18.00	22.00

Note—Above list is for wrenches with flat chain, they can also be furnished with cable chain when so ordered.

# PIPE CUTTERS

#### BARNES PATTERN



#### With Three Cutters

Malleable Iron Frame, Steel Handle, Tool Steel Cutters, 1B 2B3B **4B** 5R ........... Length, Inches... 13 16 21 25 34 Cuts Pipe, Inches. 1/8 to 1 14 to 2 2 1/2 to 4 1 1/2 to 3 4 to6 Weight Each, Lbs. 2 4 1/4 12 1/6 8 20 6.00 10.00 20.00 30.00 .40 Extra Cutters, Ea. . 25 .30 .50 .75 Extra Pins, Doz. . . 1.00 1.00 1.00 2.00 2.00

## SAUNDERS PATTERN



# With One Cutter and Two Rollers

Japanned Malleable Iron Shank and Frame, Steel Handle, Tool Steel Cutters and Rollers.

Nos	18	28	38	48
Length, Inches	16	20	26	28
Cuts Pipe, Inches	1/8 to 1	1 to 2	2 to 3	2 1/2 to 4
Weight Each, Lbs	3	6 1/4	11%	15
Each	\$3.00	4.50	11.00	18.00
Extra CuttersEach,	.24	.32	. 60	.60
Extra RollersEach,	. 24	.32	.50	.50
Extra Pins Each,	. 10	. 10	. 15	. 15

# TRIMO



# A "One" and "Three" Wheel Pipe Cutter

Drop Forged Steel Frame, Tool Steel Wheels, Steel Handle and Screw.

Nos	1 T	2T	3T
Length, Inches	15 %	17 1/2	19 1/2
Cuts Pipe, Inches	1/8 to 1 1/4	34 to 2	1 to 3
Weight Each, Lbs	5 1/4	6	8 %
Each	\$4.50	6.00	10.00
Extra Cut, Wheels, Each,	. 60	. 60	.90
Extra Pins with Cotters,			
Per Dozen	1.30	1.30	1.30

The Trimo Pipe Cutter is two tools in one. It is furnished with three wheels and two rollers. The rollers and wheels are interchangeable so that the tool may be used as a one or three wheel pipe cutter. Takes less than two minutes to make the change.

One in a Box.

# BEAVER SQUARE-END



# With Three Sets of Cutting Knives

Rigid Steel Frame with Fixed "V" Centering Jaw and a movable "V" Centering Jaw operated by the screw handle. Cutting Knives are backed up by heavy coil spring which compresses Knives on pipe making it self-feeding.

1.50

Extra Knives . . . . . . . . . . . Per Set, 1.20

# WRENCHES

BILLINGS & SPENCER SPANNER



# Model L, Adjustable

Drop Forged Steel, Dull Black Finish.

To adjust it is only necessary to press on the top of the movable jaw and slide it into its new position.

The bar is drop forged and the moving jaw is made of alloy steel, hardened all over under scientific heat controls. A most necessary set for all machine shops and manu-

facturing plants.	0	1	2	3
Length, Inches	7	9	9	10 1/8
Takes Circle, Inches	34 to 2	2 to 4	2 to 4	2 to 4 %
Diameter Pin, Inches	180	34	10	$\frac{14 - 36}{}$
Length Pin, Inches	1/8	1/4	14	1/4
Weight Each, Oz	4	8	10	21
Each	\$0.70	. 75	. 85	1.25
Or	ne in a I	Box.		

#### RONSON



#### Nine Wrenches in One

Tool Steel, Tempered, Rust Proof Nickel Finish.

#### PEXTO RADIO SOCKET



With Ebonized Hardwood Handle

Bright Hexagon Steel Shanks, Hardened Steel Sockets. Per Set

No. 1 Set—Consists of 1 Handle and 5 Interchangeable Sockets for Hex Nuts, Sizes ¼, fa.

# BIT BRACE SOCKET WRENCHES

BILLINGS & SPENCER



For Hexagon Nuts and Cap Screws

Drop Forged St	teel,	Dull	віаск	Finis	h, wit	h Sta	ndard
Brace Shank.							
Nos 9	21A	922A	922B	922C	923A	924A	924B
U. S. S. Nut	1/8		16		1/4		16
H. H. Cap Screw	1/8	10		1/4	10	3/4	
S A E Muts or							
Screws	4.4	100	1.1	1/4	16	3/6	
Openings Inches	8.4	8.2	84	49	8.8	8.6	84
Length, Inches.	4	4 1/2	4 1/2	4 1/2	4 %	5 1/4	5 1/2
Diam. Head. In.	44	7.2	2.2	2.2	9.6	音士	音士
Wt. Each, Oz	1 1/2	2 1/2	2 1/2	2 1/2	3	4	4
Each \$6	0.80	.88	.98	.98	1.04	1.16	1.16
Nos		925A	925B	925C	926A	926B	926C
U. S. S. Nut			3/8		70		
H. H. Cap Screw		36		1/2		re	
S.A.E. Nuts or Scr.	ews	36		1/2			Par
S.A.E. Nuts or Scr. Opening, Inches Length, Inches		4.1	25	12	£1	52	81
Length, Inches		5	6	6	7	7 1/2	7 1/2
Diameter Head, Inc	ches	1	1 1/8	1 1/8	1 1/8	1 32	1 32
Weight Each, Oz		5	6	6	. 7	7 1/2	7 1/2
Each							

# BRACE WRENCHES HARGRAVE SQUARE



Malleable Iron	. Harde	ened		
Nos	153	154	156	1560
Opening, Inches 3%	10	1/2	56	11
Bolt Size Nut		1/4		34
Lag Screw Size 14		Yes.	122504	70
Set Screw Size %	Y 6	1/2	5/4	
Weight Dozen, Lbs 11/	1 34	2.3	3 14	3 12
Per Dozen \$3.50	4.00	4.50	6.00	6.50
Nos	158	159	160	161
Opening, Inches	7/8	1	1 1/4	1 1/4
Bolt Size Nut	1/2	Par	5/4	34
Law Screw Size	20	5%	3/4	
Set Screw Size	36	1	1 1/8	1 14
Weight Dozen, Lbs	211	3 1/8	4 1/8	4 %
Per Dozen	87.50	8.00	9.00	10.00
Nos. 152 to 1560, One Dozen;		158 to	161, O	ne-half
Dozen in	a Box.			

## HARGRAVE HEXAGON



Manca	ne mor	i, marce	eneu		
Nos	166	167	168	169	170
Opening, Inches	3%	10	142	33	5%
Bolt Size			14	The	
Cap Screw Size	6.04	1/4	18	3/8	76
Weight Dozen, Lbs	$1\sqrt{\sigma}$	1 %	1 78	2	2 %
Per Dozen	\$3.50	4.00	4.50	5.00	6.00
Nos	172	173	1731	1732	1733
Opening, Inches	88	7/8	1	1 1/8	1 1/4
Bolt Size	10	3/2	de	5/8	3/4
Cap Screw Size	1/2	5%	34	7/8	1
Weight Dozen, Lbs	1 %	$2\frac{1}{16}$	2 1/8	3 16	3 18
Per Dozen	87.00	7.50	8.00	9.00	10.00
Nos. 166 to 171, One	Dozen;	Nos. 17	2 to 1	733, 0	ne-half
		a Box.			

# BIT WRENCHES HARGRAVE IMPROVED



For Brace Wrenches or Regular Brace Bits

The center socket holds bit rigid by means of the pointed screw. The end socket is used when leverage is required. Per Dozen

# SOCKET WRENCH HANDLES



# WRENCH SOCKETS

MOSSBERG INTERCHANGEABLE



Small Series Sockets

For owner work there are no wrenches which compare with drawn steel sockets at as low a price, and these Mossberg drawn steel sockets that have been on the market for twenty years are quite guaranteed.

Small Series Sockets are marked to exact opening of sockets. The marking of each socket represents the short diameter of nuts, bolt heads and screw heads plus the

Construction—Drawn by pressure from cold rolled steel, thereby retaining the necessary long grain in structure.

Finish-Mottled and lacquered.

#### Complete List of Small Series Sockets Hexagon

			Fitting	
Socket pening Size Hex, nches	Nu I Bo	S. Std. ts and solts. It Size nches	S. A. E. Standard Screws. Screw Size Inches	Hex. Head Cap Screws. Screw Size Inches
าใช				
11 36				
			, , , , , , , , ,	
	1.00		14	14
		1/4	18	n <sup>t</sup> e
	2.88.		3%	3/8
		1त		
			Ye.	Ye
		78		
			4/	
			7/2	1/2
		16		
	1.7.5.1			16
	23.000	16	is	54
		72	16	78
			54	
	10.000	.0.	78	
	2223	16	14	36
		5%	3/4	
	9997			76
	100000000000000000000000000000000000000	3/4	7/8	1

#### Square

		Fitting	
Socket Opening Size Square Inches	U. S. Std. Nuts and Bolts. Bolt Size Inches	Square Head Set Screws, Inches	Square Head Coach Screws, Inches
12		3/8	3/4
52 45	1/4	16 16	
33		- B	3%
52 88	177	%	· · · · · · · · · · · · · · · · · · ·
33		34	1,6
1 35	72	1 76	fü
1			3/4
1.3	3/4		

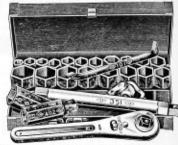
# SOCKET WRENCH SETS

MOSSBERG

In Steel Case

Per Set

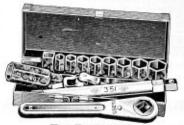
No. 10 Set—Consists
of 1 No. 350 10-in.
Ratchet Handle, 1
No. 351 9 ½-in. Extension Bar, 1 No.
336 Universal
Joint, 1 No. 101
Double End Offset
Screw Driver, 21
Hexagon Mottled
and Hardened
Pressed Steel Sockets, Sizes 35 to 152



In Kennedy Steel Tool Case



Per Set
No. 14 Set—Consists of
1 No. 350 10 in.
Ratchet Handle, 1
No. 330 10-in. Solid
"Tee" Handle, 1 No.
320 10-in. Offset.
Handle, 1 No. 351
9 ½ in. Extension
Bar, 1 Pair No. 77
6-inch Combination
Pliers, 5 Engineers'
Open-End Wrenches
with Openings ½ to 1
in., 1 No. 336 Universal Joint, 1 No. 101
Double End Offset
Screw Driver, 3 4-in.
Long Spark Plug



For Ford Cars

Per Set

No. 30 Set—Consists of 1 No. 355 8-in. Ratchet Handle, 1 No. 351 9 ½-in. Extension Bar, 1 No. 336

Universal Joint, 1 No. 101 Double End Offset
Screw Driver, 8 Hexagon Mottled and Hardened
Pressed Steel Sockets ½ to ½½ in.. Square Socket
½ and 1 4-in. Long Spark Plug Socket ¾½ in.
Opening, in Neat Steel Case, Weight Per Set
5 ¼ Lbs.

# LANES UNIQUE



# In Leatherette Case

Drop Forged Steel Sockets, Milled Ratchet, Heat Treated and Case Hardened. Particularly adapted for Ford cars.

No. S—With 7 in. Reversible Ratchet Wrench, 7 Sockets with Openings ½, %, ½, %, ½, % and % in. and 2 Screw Drivers, Weight Per Set 23 Oz. \$3.50

# ENGINEERS WRENCHES

# BILLINGS & SPENCER



15 Degree Angle, Double Head.

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened.

The heads of the Wrenches are plainly marked showing the purpose for which they are intended.

	Trade	U. S.	Hexagon Head	S. A. E. Standard	Milled	Length,	Thick- ness	We	ight	12000
Nos.	Nos.	Standard Bolt Size	Cap Screw Size	Screw and Nut	Opening, Inches	Inches	of Head, Inches	Lbs.	Ounces	Eac
1100A		1/8	1/6		1/4 - 1/8	3 1/2	972		1	80.3
1100	721	1/8	1/8 - 1/b		na - 3/8	4	1/4		134	. 3
1101	21	1/8- 170	18		76 - 13	4	1/4		1 1/4	. 5
1102	722	1/8	1/6 - 1/4	14	16 16	4 1/2	99		2 '4	- 3
1103	22	1/8 - 1/4	1/8 - 1/4	76 16		4 1/2			2	14
1104	723	78 74	16- 14			4 1/2	33		2	. 4
1105	723a	34		1/4	3% - 1/c 3% - 1/2	4 1/2	32		2	
1107	23	3 1/		าใช			33		2	2.4
1106	724	76- 14	18 24	16		4 1/2	3,7		3	
	24	3 - 5	16- %	96	36 - 15	5	18	******	3	- 1
1108	725	क्षेत्र वि	1/ 4		12- 19	5	1gt		3	- 4
1109	725a	1/4	1/4 - Te	14 - 18	76 - 1/2	5	1°G			
1110	725b		1/4 - 3/8	1/4 - 3/8	76 - 78	5	16		3	. 1
1111	25	14	- 3/s	ra - 38	1/2 - 1/2	5 1/2	16		3 1/2	
1112	726	14- th	्रवेद -	ra .	34- 39	5 1/2	16		3 1/2	
1113		1/4 3/4	- 18 Te	16 76	1/2 - 5/8	6	33		5	. (
1114	26	14 - 38	ੂ ਪੰਜ	16	16- 15	6	3.1		5	
1116	727		3/8 - 1/0	3/8 - 1/6	16 - 56	6	32		5	
1118X	27c	3/8	3/8	76	fe - 11	6 1/2	3/8		6	- 9
1118	27	18- 38			33 - 11	6 1/2	%		6	
1117	728		% - 1/2	3/8 = 1/2	1/4 - 34	7	33		8	4
1119	28	18 - 18			19- 39	7	33		8	
1119X		3/8	16	10	56 - 16	7	7.5		8	- 2
1120	729	1.1.1.1.1.1.1.1.1	7 - 1/2	ητα - 1/2	% - 34	7	53	******	8	
1120X	28s	175	16	14	56 - 39	7	33	******	8	
1123X	29	3/8	1/2	1/2	11 - 34	7	43		8	
1123	29	3/8 - 7/2			16- 35	7	33		.8	
1121	730		16 16	16	56 - 12	8	16		10	. 1
1122	730a	1/2	75- % %	10 - 10	58 - 78	8	18		10	. 1
1124	30	36 - 3/2	78	10	11 - 7/8	8	16		10	. 1
1125	731		1/2 - 170	1/2	34 - 13	9	15		13	. 1
1126	731a	1/2	1/2 - 5/8	1/2 - 16	34 - 36	9	35		13	. 5
1128	31	16- 1/2	5%	16	85- 36	9	35		13	. 5
1130	731b	1/2	ng - 5/8	18	18 - 76	9	55 14		13	. 1
1129	32	10- 10			38- 33	10		1		1.1
131	732		16 - 34	118	18-1	10	1/2	1		1.1
131X	33a	3/2	5%	18 - 56	76 - 18	10	1/2	1		1.1
1132	33	72 - Ta	98	ารื่อ	76- 31	10	1/2	1		1.3
132X	33c	*********	34	56 - 12	15-1	10	3/2	1		1
133	733	1/2	56 - 34	76 - 11	76-1	10	1/2	1		1.
134	34	1/2 - 1/8	5%	7e - %	7/8 -1 1/6	11	19	1	7	1.3
135	734	1/2	5% = - 7%	16	7% -1 1%	11	33	1	7	1.:
136X	34a	%		% - %	15-176	11	32	1	7	1.:
136	35	re- %		34	34-1 to	11	12	1	7	1 .:
138	735		74 - 76	16	1 -1 1/8	11	33	1	7	1 .:
137	36	20 - 34	1	7/8	84-14	12	32	1	14	1.5
139	736	34	%-1	18 - 76	1 -114	12	12	1	14	1.5
140	37	5/8 - 3/4	1	34 - 7/8	1 16-1 14	12	32	1	14	1.5
140X	737	34	78-1	7/8	1 1/8 - 1 1/4	12	12	1	14	1.5
141	38	56 - 76	********	%-1	1 76 -1 76	14	3/4	2	12	2.8
145	739	34	1 -11/8	. 7/8	1 1/4 -1 3/8	14	34	2	12	2.5
146	39	34 - 36	1	76-1	1 1/4 - 1 1/4	14	34	2	12	2.8
148	40	3/4 -1	1	% -1 ⅓	1 14 -1 5%	16	13	3	12	3.8
1150	41	7/8 -1		1 -1 1/8	1 7 -1 %	16	18	3	12	3.8
151	42	7/8 -1 1/8		1 -114	1 78-1 18	18	18	6	7	5.5
153	43	1 -11/8		1 1/8 -1 1/4	1 % -1 12	18	18	6	7	5.8
1154	44	1 -11/4		1 1/8 -1 3/8	1 % -2	21	1 10	10	2	7.5
155	45	1%-14		1 1/4 -1 3/8	1 13 -2	21	116	10	2	7.5
156	46	1 1/4 - 1 1/4	********	1 1/4 - 1 1/2	1 18 -2 78	23	1 1/8	11		10.5
157	47	1 14 -1 %		1 3% - 1 1/2	2 -2 %	23	1 1/8	13		10.5
158	48	1 14 - 1 1/2		1 %	2 -2 3%	24	1/2	13	8	14.0

# ENGINEERS WRENCHES



15 Degree Angle, Single Head

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened.

The heads of the wrenches are plainly marked showing the purpose for which they are intended,

Nos.	Trade Nos.	U.S.S. Bolt Size	Hex. Head Cap Screw Size	Milled Open- ings	Lgth., Inches	Th'k- ness of Head, Inches	Wt., Oz.	Each
1000A				1/4	3	14	1	\$0.28
1000	0.0	1/8	1/8	16	3	11	1	.28
1000B			16	3/8	3 1/2	15	1	.28
1001	0	rhr.		33	4	1/4	1 1/2	.30
1002	701		1/4	16	4	34	1 1/2	.30
1003	1	1/4	16	1/2	5	Yh.	3	. 36
1004	702	21.00	3/8	16	5	16	3	.36
1005	2	18		3.2	5 1/2	33	4	.44
1006	703		16	56	5 1/2	33	4	.44
1007	3	3%		11	6 1/2	3%	6 1/2	.52
1008	704		1/2	%	6 1/2	3/8	6 1/2	. 52
1009	4	10		39	7 1/2	13	7	. 64
1010	705		76	12	7 1/2	13	7	. 64
1011	5	1/2	5/8	7/8	8	33	8 1/2	.76
1012	6	10		31	8 1/2	35	10 1/2	. 92
1013	706		3/4	1	8 1/2	3.5	10 1/2	.92
1014	7	5%		1 10	9 1/4	32	13 1/2	1.14
1015	707		7/8	1 1/8	11	12		1.50
1016	8	34	1	1 1/4	11	32		1.50
1017	708A		1 1/8	1 %	13	31	120.1.1.5	2.30
1018	9	7/8		1 7	1.3	83		2.30

# HEAVY CAP SCREW WRENCHES

BILLINGS & SPENCER



15 Degree, Double Head, for Hexagon Head Cap Screws

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened.

The heads of the wrenches are plainly marked showing the purpose for which they are intended.

	ght	Wei	Th'k-		Hex. Head		
Eacl	Oz,	Lbs.		Length, Inches	Milled Openings	Cap Screw Size	Nos.
80.6	4		18	5 1/2	10 - 10	14 - 3/8	1253
. 6	4		Ϋ́σ	5 1/2	1/2 - Pa	7h - 36	1254
.7	6		3%	6 %	1/2 - 5/8	16 - 16	1255
.7	6		3/8	6 14	16- %	3/8 - 1/0	1256
. 9	9		76	7	10 - 34	36- 1/2	1257
.9	9		70	7	5% - 34	16 - 1/2	1258
1.1	12		1/2	7 34	5% - 18	10 - 10	1259
1.1	12		1/2	7 %	% - 18	1/2 - 1/8	1260
1.3	1	1	10	8 3/4	% - %	1/2 - 5/8	1261
1.3	1	1	16	8 %	18 - 76	Pa - 56	1263
1.8	8	1	5/8	10 14	18-1	Po - 34	1264
1.8	8	1	5%	10%	76-1	% - %	1265
2.5	15	1	3/4	11 %	%-1%	96 - 76	1266
2.5	15	1	3/4	11 34	1 -11/8	% - %	1268
3.3	8	2	7/8	131/4	1 -11/4	3/4-1	1269
3.3	8	2	7/8	131/4	1%-1%	%-1	1270

# THIN HEAD CHECK NUT WRENCHES



15 Degree Angle, Double Head Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened.

Nos.	Trade Nos.	U. S. Standard Bolt Size	Hex. Head Cap Screw Diam. Sc.	S. A. E. Standard Nut and Cap Screws Size Bolt	Milled Openings	Length, Inches	Thickness of Heads, Inches	Weight Each, Oz.	Each
1325			No 14	1/4	3/8 - v/v	4 1/2	202	1	80.50
1326	623D		14 - 16	14-16	76- 1/2	4 1/2	2/2	1	.50
1327			16 - 16	16-36	1/2 - 1/4	4 1/2	202	1	.50
1328	626S		36 - 7	3/8 - 1/4	70 - 5%	5 1/2	1 वें	3	. 64
1329	628D		$\sqrt{g} = 1/6$	10 - 1/2	5/8 - 3/4	5 1/2	100	2	. 64
1330	630E		1/2 - 5/8	3/2 - 1/6	34 - 34	7	270	4	.80
1350	623	16- 1/4	18	16	禮- 1/2	4 1/2	3 <sup>7</sup> 11 11 <sup>8</sup> 2	i	.50
1350X	623E	rår.	18 - 18	rie .	36 - 1/2	4 1/2	1/2		.50
1351	624	10- 10			33- 32	4 1/2	202	1	.50
1351X	623D	1/4 - 1/6	1/4	1/4 - 1/6	1/4 - 1/2	4 1/2	39		.50
1352	625	14 - 76	16	de .	1/2 - 1/2	4 1/2	n <sup>2</sup> z	1	.50
1353	626	14 - 36	16 34	de la	1/2 - 11	5 1/2	rle	9	.64
1353X	626X	3%	3/4	3/8	76 - 14	5 1/2	16 16	,	.64
1354	627	50 - 3%			18- 11	5 1/2	के	3	.64
1355	628	70 - 70			48 - 39	5 1/2	3 10	2	.64
1356	629	36 - 70			18 - 88	7	, J.	4	.80
1356X	630E	1/2 - 1/4	1/2 = 5/4	1/2 = 10	34 - 76	7	3 <sup>7</sup> 2 3 <sup>7</sup> 2		.80
1357	630	36 - 1/2	5%	200	1h- 36	7	79	4	.80
1357X	629D	70 - 1/2			5% - 34	7	72	,	.80
1358	631	76 - 1/2	56	20	88 - 76	7	7 72		.80
1359	632	$\sqrt{g} = \sqrt{g}$			88- 85	8 1/2	14	7	1.12
1359X	632X	56 - 17	74	56-11	16-1	8 1/2	1/4		1.12
1360	633	1/2 - 1/4	5%	100	76 - 31	8 1/2	1/4	7	1.12
1361	634	1/2 - 5/4	5%	10 - 34	76 +1 vin	8 1/2	1/4	7	1.12
1362	635	16 - 58		3/4	₹1 -1 10	10 1/2	32	15	1.68
1362X	635G	34 - 3/8	34 - 1	7/8	1 1/4 - 1 1/4	10 1/2	32	15	1.68
1363	636	1/4 - 3/4	1	3%	31 -1 14	10 1/2	32	15	1.68
1363X	635E	% -1	34-1	12-7/4	1 -11/4	10 1/2	32	19	1.68
1364	637	56 - 34	1	34 - 7/8	1 1/4 -1 1/4	101/2	1/2 2/2	15	1.68

# LIGHT SERVICE WRENCHES

BILLINGS & SPENCER



22 1/2 Degree Angle, Double Head

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened. The heads of the wrenches are plainly marked showing the purpose for which they are intended.

	Trade	U. S. Stand-	Hex. Head Cap Screw	S. A. E. Std. Screw	Milled	Extreme	Thick- ness of	Wei	ghts	
Nos.	Nos.	ard Bolt Size	Size	and Nut	Openings	Length, Inches	Heads, Inches	Lbs.	Ounces	Each
000	75B		$\frac{3}{10} - \frac{1}{4}$	1/4	3/8 − √σ	6 1/4	20		2	80.54
001	75A	1/4	18 -16	30	3/8 - 1/2	6 1/4	373		2	. 54
002	75	2-1/4	- Tr	n n	13 - 1/2	6 1/4	10		2	. 54
0003		16 7	3 - 3/8	3/8	36 - 76	7 1/8	1/4		4	.68
004		₹a = €a	111 /0	10000	13-13	7 1/8	24	111111111111111111111111111111111111111	4	.68
005	778	18 -16	14 −√6	1/4 -/5	7a - 3/2		54		7	
006	77C		1/4 = 3/9	1/4 - 3/8		7 1/4	59		4	. 68
					10-10	7 1/8	54	*****		. 68
007	77B	1/4	170 - 3/8	70 - 3/8	1/2 - 1/17	7 1/8	34		4	. 68
008		14 -16	16	16	1/2 - 1/2	7 1/8	1/4		4	. 68
2009	77	1/4	16 - 16	10 - 10	$\frac{1}{2} - \frac{5}{8}$	7 1/8	1/4		4	. 68
010		34 - 98	16	าร์ส	1/2-11	8 1/4	15		7	. 86
011		1/4	$\sqrt{a} - 1/2$	$\frac{1}{\sqrt{6}} - \frac{1}{2}$	1/2 = 3/4	8 1/4	Par.		7	. 86
012	798		3/8 - 1/6	3/8 - 1/6	3-56	8 1/4	TG		7	. 86
013	79A	3/8	34	3/8	76-16	8 14	76 76		7	. 86
014	79E		3/4 - 1/9	36-1/2	20 - 34	8 1/4	ra ra		7	.86
015	79D	$\frac{5}{16} = \frac{3}{6}$	625 625	55 556	32-11				7	.86
016		16 78			32 -16	8 %	rk			
	79	16-16			49-35	8 1/4	Te		7	.86
017		98	10	76	% -11	8 1/4	rie	******	7	. 86
018	79C		$\frac{7}{16} - \frac{1}{2}$	70 - 1/2	56 - 34	8 1/4	र्गंड		7	. 86
019			Y 6 - Y 6	10	56-18	9 1/4	3/8		12	1.10
020	SIE	1/2 3/4	$y_{17} = 5/8$	7e - 7a	5/8 - 7/8	9 1/4	3/8		12	1.10
021	81C	3/4	1/2	1/2	11 - 3/4	9 1/4	36		12	1.10
2022		3/8-170			14-33	9 1/4	36		12	1.10
2023	81	3/8			12-33	9 1/4	3/8		12	1.10
024		97 37	5%	16	12 - 76	9 14	3/8		12	1.10
2025	81B	78 72	1/2 = 9	1/2	34 -13			******	12	1.10
2026	S1A	1/2	1/2 - 5/8			9 1/4	%		12	1.10
	31A	72	72 - 78	1/2 - 1/2	% - %	9 1/4	3/8		12	
027X				1/2 - 5/8	34 -18	10 %	18	1		1.40
2027		*********	1/2 - 3/4	1/2-12	34 -1	10 %	Ť	1		1.40

# SHORT HEAVY "S" WRENCHES

BILLINGS & SPENCER



22 1/2 Degree Angle, Double Head

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened. The heads of the wrenches are plainly marked, showing the purpose for which they are intended.

Nos.	Trade Nos.	U.S. Standard Bolt Size	Hex. Head Cap Screw Size	Milled Openings	Length, Inches	Thickness of Heads, Inches	Weight, Oz.	Each
1400	661D	1/8	1/8 - 3	1h - 1/8	4	ala.	1	80.44
1401	661A	1/8 - 3/4		74-12	4	172	1	.44
1402	661E	1/8	1/8 - 1/4	10-10	4	70	1	. 44
1403	661B	1/8 - 1/4	vit.	$\sqrt{n} = \frac{1}{2}$	4	14	1	. 44
1404	661F		$r_{10}^{3} - r_{14}^{3}$	36-70	4	1/4	1	.44
1405	661G	1/4	$r_{10}^{3} = r_{10}^{3}$	3/8 - 1/2	4	1/4	1	. 44
1406			-7k - 96	3/8 - 1/8	4	1/4	1	.44
1407	661C	$\frac{3}{16} - \frac{1}{4}$	vis.	18-16	4	1/4	1	. 44
1408	662A	16-16		38-38	5	via.	3	.58
1409	662D	1/4	1/4 - 1/h	$\sqrt{a} = \frac{1}{2} \frac{1}{2}$	5	Yes	3	. 58
1410	662E		14 - 3/8	70-70	5	250	3	. 58
1411	662F	1/4	16 - 3/8	1/2 - 1/2	5	- Ale	3	. 58
1412	662B	14 - Ya	- Par	1/2 - 1/2	5	vis.	3	. 58
1413	662G	1/4	18 - 16	1/2 - 5/8	5	180	3	. 58
1414	662C	1/4 - 3/8	- Per	16-11	5	vis.	3	. 58
1415		1/4	$r_{1}^{0} = \frac{1}{2}$	$\frac{1}{2} - \frac{3}{4}$	5	- Či	3	. 58
1416	663D		3/8 - 1/0	19 - 5/8	6.14	3%	6	. 78
1417	663E		3/8 - 1/9	76-34	6 1/4	3%	6	. 78
1418	663A	vis = 3%		18-14	6 1/4	36	6	. 78
1419	663B	10 -10 10 -10		12-11	6 1/4	36	6	. 78
1420	663F	10 10	$\sqrt{c} = 1/2$	56 - 34	6 1/4	3/4	6	. 78
1421	663G		0 0	56 -13	6 1/4	36	6	.78
1422		1/2	7a - 5%	56 - 76	6 1/4	3/8	6	.78
1423	663C	3/8 - 1/6	10 /8	18-85	6 1/4	3/8	6	. 78
1424	664A	3/8 - 1/2	5%	12 - 38	7 1/4	2.	10	1.00

# SET SCREW WRENCHES

BILLINGS & SPENCER



22 1/2 Degree Angle, Double Heads

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened.

The Heads of the Wrenches are plainly marked showing the purpose for which they are intended.

No.	Milled Opening	T	Thick- ness	We	ght	Each
No.	for Set Screw Size	Length	of Heads	Lbs.	,0zs.	Each
1523	16-14	3 1/2	ris		1	80.40
1524	30-30	4	3/4		2	.48
1525	1/4 - 1/4	4	34		2 2 3 5	.48
1526	34-36	5	A.		3	.58
1527	√6 − 3/s	5	1 de 1 de 1		3	.58
1528	$g_{1}^{b} - g_{1}^{c}$	6	3.5		5	. 70
1529	36-76	6	3.5		5	. 70
1530	3/8-1/2	6 %	% % 10	11111	7	- 90
1531	70-1/2	6 %	98		7	. 90
1532	16 - 16	7 1/2	10		9	1.08
1533	$\frac{1}{2} - \frac{2}{10}$	7.1/2	16		9	1.08
1534	1/2-5/8	8 1/2	1/2		15	1.30
1535	18 - 58	8 1/2	1/2		15	1.30
1536	$\gamma_0^2 - 34$	10	18	1	2	1.60
1537	58-54	10	रीव	1	2	1.60

# CAR WRENCHES

BILLINGS & SPENCER



2234 Degree Angle, Double Head

Drop Forged Steel, Hardened, Natural Finish.

No.	Trade No.	U. S. Stand- ard Bolt Size	Milled Open- ing	Length	Thick- ness of Heads	Wt. Each, Lbs.	Each
1800	367	3/4 - 1/2	38- 38	12	J.	1 %	\$1.50
1801	370	1/2 - 5/4	\$5-1 1/a		1/0 1/2 1/2	3 1/8	2.50
1802	371	1/2- 3/4	18-1 %	2.0	1/4	3 1/2	3.10
1803	373		1 1/4-1 7/6		200	3 1/2	3.10
1804	374	56- 76	1 1/4-1 1/2		76	4 7%	3.70
1805	376	34 - 76	1 /6-1 1/2		-2	4 7%	3.70
1806	3.77		1 %-1 11		5%	6 1/2	4.50
1807	379	7/6−1	1 1/2-1 11	22	5%	6 10	4.50
1808	380	%-11/8	1 1/2-1 7/8	23	5/4	7 %	5.30
1809	3.82	1 -118	1 11-1 %	23	76 5% 5% 5% 5%	7 %	5.30
1810	383	1 -112	1 11-2 1	24	56	8 %	6.30
1811	385	114-114	1 %-2 %		56	8 %	6.30
1812	387	1 1/6-1 1/2	1 1/8 -2 1/8	2.5	34	9.5%	9.00
1813	389		2 16-2 76	2.5	34	9 56	9.00

# TOOL POST WRENCHES

BILLINGS & SPENCER



Double Head, for Sct Screws

Drop Forged Steel, Dull Black Finish, Polished Heads, Hardened.

No.	Onen End	Closed End	Length	Thick- ness of Heads	Weight Each Ozs.	Each
1875	rše.	vic.	5 1/2	1/6	5	81.12
1876	1/2	14	6	10	7	1.24
1877	The state of	36	6	ile.	7	1.24
1878	res.	76	6	19	7	1.24
1879	56	5%	6 %	58	11	1.44
1880	11	5%	6 3/4	5/8	11	1.44
1881	37	-11	6.34	5/8	11	1.44
1882	34	34	7.36	11	16	1.64

# CONSTRUCTION WRENCHES

BILLINGS & SPENCER



15 Degree Angle

Drop Forged Steel, Handle Used for Lining Up Bolt Holes.

No.	U.S.S. Bolt	Milled	T 12	Thick-	We	ight	Es	ich
140.	Size	Open- ing	Lgth.	Head	Lbs.	Ozs.	Untin	Hard
1675	3%	11	9 1/2	rie .		8	\$0.70	\$0.90
1676	170	58	9 16	Te.		8	. 70	.90
1677	1/2	74	1134	1/2	1		.90	1.16
1678	Vla.	33	11 %	1,6	1		.90	1.16
1679	5%	1 .	13 1/2	-De	1	8	1.24	1.60
1680	34	1 1/4	15 %	5/4	2	5	1.72	2.20
1681	7/8	1 70	1734	11	2	13	2.36	3.00
1682	1	1 5%	19	34	4	3	3.20	4.20
1683	1 1/6	1 13	21	7/6	6	14	4.40	6.00
1684	1 14	2	21	7%	7		4.40	6.00

# STRUCTURAL WRENCHES

BILLINGS & SPENCER



Straight Opening and Off-Set Head

Drop Forged Steel, Designed for Structural Iron Workers. The Handle is used for bringing bolt holes into alignment.

No.	U.S.S. Bolt	Open-		Thick- ness	Hndl.	We	ight	E	ich
	Size	ings	Lgth.	Head	Offset	Lbs.	Ozs.	Unfin.	Hard
1700	1/4	2.2	8	3/8	12		5	\$0.66	80.80
1701	Yer .	98	8	36	13		5	.66	
1702	%	53	9 1/2	70	7/8		7	.80	1.04
1703	16	福	9 1/2	30	7/8		7	.80	1.04
1704	1/2	29	11%	1/2	1		12	1.04	1.40
1705	18	1	11 %	1/2	1		12	1.04	1.40
1706	5/8	1.7	13 1/2	5%	1 1/8	1	9	1.48	1.96
1707	3/4	1 1 1 1	15 1/2	11	1 1/4	2	10	2.04	2.68
1708	7/8	1 1/2	17	34	1 //	3	11	2.80	3.60
1709	1	111	19	18	1 %	3	15	3.80	5.00
	1 1/8	1 1/8	19	18	13%	4	1	3.80	5.00
1711	11/4	2 16	24	1	1 %			7.00	8.50

# DROP FORGED WRENCH SETS

#### BILLINGS & SPENCER

The Wrenches in these Sets are drop forged from specially selected open hearth steel to our specifications. The steel is analyzed in modern metallurgical laboratory before being used. In addition these tools are heat treated after machining to toughen and harden the steel. They are smoothly polished and finished in attractive "Duro" black rust-proof finish with heads brightened and lacquered.

The cases illustrated are made of heavy tan colored canvas, and contain a pocket for each wrench. The heads of the wrenches are plainly marked showing the purpose for which they are intended.

#### LIGHT SERVICE



#### For Manufacturers Standard Nuts and Bolts.

These Sets are made up of Standard Light Service "S" Wrenches carefully selected for the work the Set is designed for.

Per Set

No. 1 Set—Consists of 5 Light Service Wrenches, One Each Nos. 2002, 2009, 2017, 2023 and 2032 as Described Below, Weight Per Set 4 Lbs......\$4.58

No. 1R Set—Same as No. 1 in Canvas Roll...... 5.13

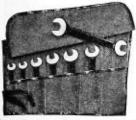
#### Contents of No. 1 Set

Nos.	Trade Nos.	For Mfgrs. Std. Nuts Size Bolt	Milled Openings	Lgth., Inches	Thick- ness of Heads, Inches	Each
2002	7.5	Pe-14	11-14	6 1/4	n <sup>T</sup> n	\$0.54
2009	77	1/4 - 1/2	$\frac{1}{2} - \frac{5}{8}$	7 1/8	1/4	.68
2017	7.9	16 - 36	$\frac{5}{6} - \frac{11}{6}$	8 1/4	Še.	. 86
2023	81	3/8 - 1/8	11-32	9 14	3/8	1.10
2032	83	76-1/2	92-15	10%	70	1.40

#### Contents of No. 2 Set.

Nos.	Trade Nos.	Size Screw S. A. E. Head and Nut	Milled Openings	Lgth., Inches	Thick- ness of Heads, Inches	Each
2001	75a	ris.	3/8 - 3/2	6 1/4	3/2	80.54
2013	79a	3/8	26 - 11	8 14	Yes.	.86
2026	81a	$\frac{1}{2} = \frac{9}{10}$	34 - 78	9 14	3/8	1.10
2038	83a	5% - 11	孙-1	10 %	ารีซ	2.00
2044	85b	3/8	1 1/4 -1 1/4	12	1/2	2.00

#### DOUBLE HEAD ENGINEERS



For Hexagon Head Cap Screws and U. S. Standard Nuts. Per Set No. 5 Set—Consists of 7

No. 5R Set-Same as No. 5 in Canvas Roll...... 7.29

#### Contents of No. 5 Set.

Nos.	Trade Nos.	For Hex. Head Cap Screws & U. S. Std. Nuts	Milled Openings	Lgth., Inches	Thick- ness of Heads, Inches	Each
1109 1112	725 25	1/4	7 - 1/2 1/ 18	5 5 1/4	าร์	\$0.50
1118X	27c	16 36	78- 18	6 1/2	16	.62
1120X	28s	76	56- 85	7	3/8	.74
1126	731a	1/2	%- %	9	78	.90
1134	34	5%	% −1 16	11	13	1.36
1139	736	3/4	1 -11/4	12	12	1.92

#### DOUBLE HEAD ENGINEERS



S. A. E. Standard, 15 Degree Angle. Handy for Automobile Mechanics.

Per Set

No. SR Set—Same as No. 8 jn Canvas Roll . . . . . . . . . 5.51

## Contents of No. 8 Set.

Nos.	Trade Nos.	Size Screw S. A. E. Head and Nut	Milled Openings	Lgth., Inches	Thick- ness of Heads, Inches	Each
1105	723a	150	3/8 - 1/2	4 1/2	20	\$0.42
1118X	27c	36	3- 11	6 1/2	11	. 62
1126	731a	$1_2 = \frac{9}{16}$	34 - 78	9	76	.90
1132X	33c	56-11	18-1	10	3.5	1.10
1140X	737	7/8	1 1/4-1 1/4	12	33	1.92

# 200

#### THIN CHECK NUT

For S. A. E. Standard Nuts and Cap Screws,

Extra Thin, 15 Degree Angle, Double Heads. Per Set No. 14 Set—Consists of 5 Check

#### Contents of No. 14 Set.

Nos.	Trade Nos.	Size Screw S. A. E. Head and Nut	Milled Openings	Lgth., Inches	Thick- ness of Heads, Inches	Each
1350X	623e	via.	3/8 - 1/2	4 1/2	5.	\$0.50
4353X	626x	36	16 - 11	5 1/2	78	.64
1356X	630e	$\frac{1}{2} - \frac{1}{2}$	34 - 78	7	3/2	.80
1359X	632x	56-11	₹ā -1	8 1/2	1/4	1.12
1362X	635g	34 - 78	1 1/4-1 1/4	10 %	57.	1.68



# DOUBLE HEAD ENGINEERS 15 Degree Angle.

For Hexagon Head Cap Screws and Nuts.

No. 15 Set—Consists of 8 Wrenches, One Each as Described Below, Wt. Per Set 6 Lbs. . \$7.28

No. 15R Set—Same as No. 15 in Canvas Roll 8.28

#### Contents of No. 15 Set.

Nos.	Trade Nos.	Size of Screw	Milled Openings	Lgth., Inches	Th'k- ness Heads, Inches	Each
1109 Cap	725	14 - Ac	76- 1/2	5	16	\$0.50
1116 Cap	727	$\frac{3}{6} - \frac{7}{16}$	70- %	6	11	, 62
1125 Cap	731	$\frac{1}{2} - \frac{1}{2} \pi$	84- 18	9	76	.90
1133 Cap	733	58-34	₹8-1	10	35	1.10
1112 Nut	25	$\frac{1}{4} - \frac{1}{16}$	34- 38	5 1/2	The .	. 50
1123 Nut	29	$\frac{3}{6} - \frac{7}{10}$	11- 65	7	3/8	.74
1132 Nut	33	3/2-19	76- 81	10	35	1.10
1140 Nut	37	56-34	1 1/2 -1 1/4	12	19	1.92

# MOLYBDENUM ENGINEERS WRENCHES



# Billings Life-Time Wrenches Are Made of Chrome-Mo-lyb-den-um Steel-The Super Alloy-(Billings Formula)

These long, thin, Powerful wrenches with "Spear" shaped heads may be used in close or cramped quarters where an ordinary carbon wrench would be ineffectual.

The handles of the wrenches are rounded and smoothly finished, affording a comfortable grip for the user, a point which will be appreciated by the mechanic who has to use a wrench of this kind for long periods.

The wrenches are finished in nickel over copper plating with heads buffed, a beautiful and permanent rust-proof finish.

They are hardened and tempered by our exclusive process, under the most scientific heat control devices, insuring that these Powerful Wrenches Will Last a Life-time.

Nickel Plated, 15 Degree Angle, Double Head

	Equivalent B. & S.	Milled	U. S. S.	Hex. Head Cap Screw	S. A. E.	Extreme	Thick- ness of	Weigh	Each	Nickel
Nos.	Carbon Wrench	Openings	Bolt Size	Size Size	Nut and Bolt Size	Length, Inches	Head, Inches	Lbs.	Oz.	Each
M1721	1100	- 3/a	1/8	1/8 - 1/8		4 1/4	13		1 1/6	20.80
M1021	1101	5- 33	1/8 - 132	1/8		4 1/4	11		1 1/2	.80
M1722	1102	18 - 18	1/8	1/8 - 1/4	1/4	4 1/4	13		1 1/2	.80
M1723	1104	3/8 - 1/1		- NA	1/4	4 1/4	13		1 1/2	.80
M1022	1103	5 - 1/2	1/4 - 1/4	1/4-16	75	4 3/4	372		2 1/6	.96
M1023	1107	12 - 14	30 - 1/4	75	yst.	4 %	72		2 1/2	. 96
M1723A	1105	3/8 - 1/2	1/4	10-10	100	4 34	372		2 1/2	.96
M1024	1108	33 - 33	18-16			5 3/2	1/4		3 1/2	1.16
M1725	1109	74 - 1/2	1/4	14 - Pa	14 - Az	5 1/2	3/4		3 1/6	1.16
M1725A	1110	$\gamma^{7}_{G} = \gamma^{9}_{G}$		3/4 - 3/8	1/4 - 3/4	5 1/2	3/4		3 1/2	1.16
M1725B	1111	1/2 - 1/6	14	75 - 3/4	5-34	5 1/2	1/4		3 1/4	1.16
M1025	1112	16 - 18	14-16	15	750	5 1/2	3/4		3 1/2	1.16
M1726	1113	16 - 56	1/4	19 - 17 r	15 - 7c	6 3/2	32		5	1.40
M1026	1114	1/2 - 11	14-36	रीर	rie .	6 1/6	100		5	1.40
M1727	1116	-Az - 56		3/5 - 1/4	36 - 7	6 1/2	32		5	1.40
M1027	1118	38 - 35	$-\frac{3}{10^{2}} - \frac{3}{2}$			6 1/2	200		5	1.40
M1027C	1118X	77 - 11	3%	34	3/8	6 1/2	22		5	1.40
M1728	1117	n- 34		36 - 1/2	36-1/2	7 34	3/8		9	1.74
M1028	1119	19 - 35	$\gamma_{ij}^{0} = \gamma_{ij}^{0}$			7.34	3/4		9	1.74
M1028S	1120X	54 - 38	76	vic.	70	7 %	36		9	1.74
M1729	1120	56 - 34		$\sqrt{a} = 1/2$	16-14	7.34	% %		9	1.74
M1029	1123	11- 35	3/4 - 1/17			7 34	3/8		9	1.74
M1030	1124	11 - 7/8	3/4 - 1/2	5/8	-Ar	7.34	3%		9	1.74
M1731	1125	34 - 15		16 - 20	1/2	9 1/4	10	111111111	12 1/2	2.14
M1731A	1126	34 - 7/8	1/2	1/2 = 5/8	1/2 - 1/3	9 14	16		1216	2.14
M1031	1128	88 - 74	3-16	5/8	787	9 1/4	10		12 1/2	2.14
M1731B	1130	13 - 76	1/2	16 - 5%	200	9 1/4	76		121/2	2.14
M1032	1129	88 - 88	70 - 10			9 1/4	70		1236	2.14
M1033A	1131X	74 - 15	1/2	5%	19 - 5/8	9 1/4	70		121/2	2.14
M1033	1132	7/8 - 31	1/2 - 1/2	56	200	9 14	70		121/2	2.14
M1733	1133	76-1	1/2	5/4 - 3/4	9 - 11	10 %	1/2	1	3	2.64
M1033C	1132X	15-1		%	5% - 17	10%	1/6	î	3	2.64
M1034	1134	74 -1 77	1/2 - 5/6	5%	2 - 34	10%	1/6	1	3	2.64
M1734	1135	76-1 1/8	1/2	56 - 78	Pa	10%	1/2	î	3	2.64
M1034A	1136X	15-1 7g	56		5% - 3%	10 %	16	1	3	2.64
M1035	1136	11 -1 va	20 - 5/8		34	10%	1/9	1	3	2.64
M1735	1138	1 -1 1/8		% - 7%	11	1234	18	1	8	3.18
M1036	1137	83-134	-8-34	1	7/8	121/4	18	1	8	3.18
M1736	1139	1 -1 1/4	34	34-1	11 - 76	12 1/4	12	1	8	3.18
M1037	1140	1 % -1 1/4	5/8 - 3/4	1	34 - 76	1214	13	i	8	3.18
M1737	1140X	1 1/4 - 1 1/4	34	74 - 1	76	1234	13	1	8	3.18

Mo-lyb-den-um has but recently come into prominence in the field of commercial alloy steels. For some time it has been used as a fairly satisfactory substitute for Tungsten in High Speed Steels.

The discovery of extensive deposits of this metal in Colorado,—at about the time the World War created a shortage of all other alloying elements,—led to further research on the effect of Mo-lyb-den-um in steel. It was determined that Mo-lyb-den-um produced much the same effect as the most prominent steel alloying elements, Nickel and Chromium twas further determined that Steels containing Chromium and Mo-lyb-den-um possessed physical properties far

# MOLYBDENUM GENERAL SERVICE WRENCHES



Nickel Plated, 22 1/2 Angle, Thin Double Heads

The use of Chrome-Mo-lyb-dcn-um steel (Billings' formula) marks a distinct advance in wrench manufacture and is the result of painstaking research and experiment not only by the engineers of the Billings & Spencer Company but by the leading metallurgists in the Steel Industry as well. These tests and experiments covered a period of years and resulted in the development of a super alloy steel (Billings' Chrome-Mo-lyb-den-um formula) which makes possible a stronger and (ougher wrench than any wrench now on the market.

The Billings' General Service "S" Wrench is made in the same dies as the Light Service Carbon Wrench, but thru the use of Chrome-Mo-lyb-den-um steel (Billings' formula) these wrenches are by far the strongest, toughest, and most practical "S" wrenches ever offered the American mechanic.

The Billings' Mo-lyb-den-um General Service "S" Wrench is designed with long, thin, powerful jaws which will permit the use of these wrenches in close quarters where an ordinary carbon wrench could not be used.

	Equiv.	Milled	U.S.S.	Hex. Hd.	S.A.E.		Thick-	W	eight	Nickel
No.	B. & S. Carbon Wrench	Open- ings	Bolt Size	Cap. Sc. Size	Nut and Bolt Size	Extreme	ness of Head	Lbs.	Ozs.	Plated Each
M1075B	2000	3/8 - \(\tilde{\gamma}\)		$r_0^2 = 1/4$	14	6 14	7		2	\$1.30
M1075A	2001	3/8 - 1/2 3/8 - 1/2	1/4	18 - 18	— A	6.34	372 372		2	1.30
M1075	2002	13- 1/2	35 - NA	10	ye	6.14	n <sup>7</sup> 2		2	1.30
M1077S	2005	7c - 1/2	14	$\frac{1}{4} - \frac{1}{16}$	$\frac{1}{4} - \frac{1}{16}$	7 1/8	1/4		4	1.65
M1077B	2007	1/0 - 1/0	1/4	$A_6 - 3_8$	$\frac{5}{16} - \frac{3}{8}$	7.3/8	1/4 1/4		4	.1.65
M1077	2009	1/2 - 5/8	14	$\gamma_{ij}^{b} = \gamma_{ij}^{7}$	70 - 10	7.1%	1/4		4	.1.65
M1079B	2012X	₹6 - 13	75	3/8	3/8	8 14	No.		7	2.05
M1079S	2012	0 - 5/8		$\frac{3}{8} - \frac{7}{16}$	36-76	8 1/4	Por		7	2.05
M1079A	2013	16- 11	3/4	3/8	3/8	8 1/4	A.		7	2.05
M1079	2017	56- 11	3/8	12	75	8 1/4	vis.		7	2.05
M1079C	2018	56 - 34		76-1/2	$\sqrt{a} = 1/2$	8 %	A		7	2.05
M1081	2023	11- 35	3/4	10 12		9 1/4	34		12	2.50
M1081B	2025	34 - 15		$\frac{1}{2} = \frac{h}{16}$	1/2	9 1/4	3%		12	2.50
M1081A	2026	34 - 7/8	1/2	1/2-5/8	1/2-1/6	9 14	36		12	2.50
M1083	2032	85- 18			5%	10 %	3	1		3.10
M1083B	2035	7/8-1	1/2	5/8 - 3/4	16-11	10 %	30	1		3.10
M1083A	2038	15-1		3/4	56 - 11	12	14	2		3.90
M1085	2041	1 -1 1/4		3/4 - 7/8	16	12	· · · · · · · · · · · · · · · · · · ·	2		3.90
M1085C	2043	1 1 14	58 - 34	1	$\frac{34}{4} - \frac{7}{8}$	12	16	2		3.90
M1085B	2044	1 1/4 -1 1/4	34	76-1	7%	12	16	2		3.90

# MOLYBDENUM STRUCTURAL WRENCHES



Nickel Plated, Straight Opening and Offset Head

The Structural Wrench, like the Construction Wrench, is used by men engaged in arduous labor, under the most dangerous conditions, where a man's life may be endangered by a weak wrench.

Billings' Chrome-Mo-lyb-den-um structural wrenches possess reserve strength in excess of any strain that the user may place on them. This additional strength and toughness is made possible by the use of Chrome-Mo-lyb-den-um steel—The Super-Alloy—(Billings' formula).

This alloy steel was selected for these wrenches by Billings' engineers in collaboration with the leading metallurgists in the Steel Industry after exhaustive tests and experiments with all known alloys.

This combination tool was designed originally for struc-

tural iron workers and for use on construction work where an offset wrench was necessary for clearance and for the protection of the hands of the user. This type of wrench is now very popular with machine erectors, truck and bus assemblers and repairmen who have found this wrench more practical for the work than ordinary wrenches because of its greater length, offset head and greater strength.

The tang is used for bringing bolt holes into alignment and serves as a comfortable handle for the user.

These wrenches are finished in dull nickel over copper plate, a practical rust-proof finish. They are hardened and tempered by our exclusive method, under the most complete scientific heat control devices, insuring that These Powerful Wrenches Will Last a Life-Time.

	Equiv.	Milled	U.S.S.	Hex. Hd.	S.A.E.		Thick-		Weig	ht	Nickel
No.	B. & S. Carbon Wrench	Open- ings	Bolt Size	Cap Sc. Size	Nut and Bolt Size	Extreme Length	ness of Head	Handles Offset	Lbs.	Ozs.	Plated Each
M1903 M1904	1702 1703	23 32 13	3/8		:::::::	9 ½ 9 ½	771	7/s		7	\$2.35 2.35
M1905	1704	29	16	56	- 3-	11 34	1/4	1 78		12	3.15
M1906	1705	1	-Dr	34	11	11 %	1/4	1		12	3.15
M1907	1706	1 7	5%		34	1316	1/2 5/8	1 1/6	1	9	4.40
M1908	1707	1 12	34	1	7/8	15 1/2	11	1 1/4	2	10	6.00
M1909	1708	1 1/2	76	1 1/4		17	3/4	1 %	3	11	8.15
M1910	1709	1 1/2	1	1 3%	1 1/8	19	18	1 %	3	15	11.35

# T HANDLE SOCKET WRENCHES

# BILLINGS & SPENCER

Hexagon Opening.

## With Pin Handle

These Socket Wrenches are drop forged from specially selected open hearth steel to our specifications. The steel is analyzed in our modern metallurgical laboratory before being used. In addition these tools are heat treated after machining to toughen and harden the steel. They are smoothly polished and finished in our attractive "Duro" black rust-proof finish.

# With Hexagon Openings





Square Opening.

Wrench	Trade	For U. S. Standard		S. A. E. Standard	Short Diameter		Diam.	Hex. End Same Size as U. S.	Length of Pin	Weigh	t Each	Each
Nos.	Nos.	Nut, Size Bolt	Diameter		Broached Opening, Inches	Length, Inches	Head, Inches	Nut for Size Bolt, Inches	Handle, Inches	Lbs.	Ounces	
721X					.260	4	36	16	4		2	80.80
720A					22	4	1/2	र्गेंग	4		2	.80
721A	961A	1/4			61	4	1/2	18	4		2	. 80
721B					83	4	1/4	r/e	4		2	. 80
722A	962D		-37		49	4 1/2	1/2 5/8	14	4 1/4		3 1/2	.88
722B	963A	100			81	4 3/6	5/8	1/4	4 1/2		3 1/2	.98
722C	963D			14	22	4 %	5/8	14	4 1/2		3 1/2	.98
723A	964A	1/4	- Ac	15	33	5 34	3/4	fa l	5 1/4		5	1.04
724A	965D		36	34	37	5 %	7/8	3/8	5 34		7	1.16
724B	965A	ήπ.		110	32	5.34	7/8	3/8	5 %		7	1.16
725A	966D		76	70	81	6 1/8	1	70	6 1/8		11	1.26
725B	967A	36			44	6 1/8	1 1/8	75	6 1/8		11	1.42
725C	967D		1/2	1/2	42	6 1/8	1 1/4	Tir.	6 1/8		11	1.42
726A	968A	77		30000000	11	7	1 1/4	1/2	7	1	2	1.54
726B	968D		10	correct	53	7	1 1/4	1/2	7	1	2	1.54
726C	969A	1/2	5%	18	81	7	1 1/4	1/2	7	1	2	1.74
727X	100000000			54	81	7 7/8	1 1/2	1/2	7.7%	1	11	1.96
727A	970A	10			51	7.7%	1 1/4	5/8	7 7/8	1	11	1.96
727B	970D		3/4	11	1 2	7.7%	1 1/2	56	7 7/8	1	11	1.96
728A	971A	56		34	1 0 7	8 %	1 %	56 34	8 %	2	6	2.20
728B	971D		76		1.52	8 %	1 5%	%	8 %	- 2	6	2.60
729A	973A	34	1	76	1 32	9.14	1 7%	34	9 1/8	3	2	3.00
730A	974D		1 1/8		1 13	10	2 1/8	78	10	4	6	3.40
730B	975A	36			133	10	2 1/8	76	10	4	6	3.70
730C	975D		134	1	133	10	2 1/8	7/8	10	4	6	3.70
731A	976A	1		1 1/4	1.21	10 %	2 1/6	1	10.76	6	3	4.24

# With Square Openings

Wrench	Trade	For U. S. Standard	For Cap Screw,	For Set	Short Diameter		Diam.	Hex. End Same Size as U. S.	Length of Pin	1		The sh
Nos.	Nos.	Nut, Size Bolt	Diameter	Size Screw	Broached Opening, Inches	Length, Inches	Head, Inches	Nut for Size Bolt, Inches	Handle, Inches	Lbs.	Ounces	Each
7203	960H			1/8	1/4	3.5%	19	1/8	-3		1	\$0.70
721J	961H			rin.	12	4	1,6	76	4		2	.80
721K	961J			14	22	4	1/2	130	4		2	.80
722J	962H			15	21	4 1/6	56	14	4 14		3 %	.88
723J	963H		34	3/8	81	5.14	34	- Ac	5 14		5	.98
724J	965H		vie.	* 77	2.9	5 34	7/8	3/8	5 34		7	1.16
725J	966H	34	3/8	1/2	2.3	6 1/8	1	70	6 1/4		11	1.26
725K	967H		16	-20	21	6 1/8	1 1/2	76	6 1/8		11	1.42
726J	967X	- fir			89	7	1 14	1/2	7	1	2	1.42
726K	968H		1/2	5%	41	7	1 1/4	1/2	7	1	2	1.54
726L	968P	36	780		45	7	1 1/4	1/2	7	1	2	1.54
727J	969H		5%	3/4	42	7.7%	1 1/2	56	7 3%	1	11	1.74
727K	970X	77			53	7.7%	1 %	5%	7.7%	1	11	1.96
728J	971H	1/2	34	7/8	65	8 5%	1.5%	34	8 %	2	6	2.20
729J	971X	187			61	9 3/8	1 %	3/4	9 1/4	3	2	2.60
729K	973H			1	124	9 1/8	1.74	34	9 1/8	3	2	3.00
729L	974X	5%			1.5	9 1/8	1 34	34	9 1/8	3	2	3.40
730J	974H		76	1 1/8	1 %	10	2 1/4	7/8	10	4	6	3.40
730K	976H	34	1	1 1/4	1.32	10	2 1/4	76	10	4	6	4.24
731J	977N		1 1/8		144	10.7%	2 1/2	1	10 %	6	3	4.80
731K	977X	7/8			135	10 %	2 1/2	1	10 %	6	3	4.80
732J	977P		1 1/4		145	113%	2 34	1 1/4	113%	7	4	4.80
732K	978P	1	1 %		185	113%	2 3/4	11/4	113%	7	4	5.70

# OFFSET HANDLE SOCKET WRENCHES

BILLINGS & SPENCER



"Duro" Black Rust-Proof Finish.

Drop Forged from Specially Selected Open Hearth Steel, Heat Treated After Machining.



Square Openings.

Hexagon Openings.

# With Hexagon Openings.

*********	Trade	For U. S.	Consess	S. A. E. Standard	Short Diam. of	From Face of	Diam. or	Length	Diameter of	Weigh	t Each	
Wrench Nos.	Nos.	Std. Nut. Size Bolt	Diam or		Broached Opening, Inches	Wrench to Handle, Inches	Head, Inches	Handle, Inches	Handle, Inches	Lbs.	Ounces	Each
821A	261A	1/8			31	3/4	1/2	3 14	1/4		1	\$0.60
822A	262D		14		35	43	56	4	3/8		3	.66
822B	263A	136			15	18	5%	4	36		3	.72
822C	263D		1/4	1/4	72	18	5%	4	%		3	.72
823A	264A	1/4	Te.	re.	83	1 1/4	34	4.34	36		4	.78
824A	265D			3/8	34	1 70	76	5 1/2	170		5	.88
824B	265A	16			22	1 T	7/8	5 1/2	76		5	.88
825A	266D		170	10	44	111	1	6 14	1/2		9	. 96
825B	267A	3/8			8.5	1 3/4	1 1/8	7	1/2		10	1.08
825C	267D		1/2	1/2	22	1 3/4	1 1/8	7	1/2		10	1.08
826A	268A	Ϋ́σ			81	2	1 1/4	7 34	5%	1	4.1.4.4.4.4.4.4	1.20
826B	268D		rla		53	2	114	7 34	56	1		1.20
826C	269A	1/2	5%	ric .	84	2	1 1/4	7 %	5%	1		1.38
827X				58	91	2 78	1 1/2	8 1/2	11	1	6	1.56
827A	270A	10			63	2 3	1 1/2	8 1/2	11	1	6	1.56
827B	270D		3/4	11	14	2 %	1 3/2	8 1/2	11	1	6	1.56
828A	271A	5%		34	1 %	2 1/2	1 %	9 14	11 34 34	1	15	1.80
828B	271D		78		1 32	2 1/2	1 %	9.14	84	1	15	1.80
829A	273A	3/4	1	76	1 33	2 13	1 %	10	7/8	2	11	2.40
830A	274D		1 1/8		1 13	3 4	2 1/8	10 %	1	3	5	2.70
830B	275A	7/8			135	3 1/4	2 1/8	1034	1	3	5	3.00
830C	275D		1 14	1	135	3 4	2 1/8	10 %	1	3	5	3.00
831A	276A	1		1 1/8	1 3 5	3 76	2 1/2	1112	1 1/8	5	5	3.44

# With Square Openings.

Township.	Trade	For U. S. Standard	For Cap Screw.	For Set Screw,	Short Diam. of	From Face of	Diam. of	Length	Diameter of	Weigh	t Each	
Vrench Nos.	Nos.	Sq. Nut, Size Bolt	Diam. of	Size Screw	Broached Opening, Inches	Wrench to Handle, Inches	Head, Inches	Handle, Inches	Handle, Inches	Lbs.	Ounces	Each
820J	260H			1/6	1/8	34 34 34	11	2 34	572		1	\$0.54
821J	261H			10	11	34	3/2	3 1/4	34		1	. 60
821K	261J			34	1.1	34	1/2	3 14	1/4		1	, 60
822J ·	262H			16	21	18	56	4	36		3	. 60
823J	263H		1/4	36	21 21 21 25	1 1/4	94	4.%	3/8		4	. 72
824J	265H		र्रव	10	204 204 207 207 204	1 75	76	5 1/2	16		5	.88
825J	266H	1/4	36	1/2	27	1 1 1	1	6 14	1/2	++++++	9	. 96
825K	267H		70	70	84	1 %	1 1/8	7	1/2		1.0	1.0
826J	267X	√g.		erector.	23	2	114	7 %	5%	1		1.08
826K	268H		1/2	5/8	2.2	2	1 14	7 %	58	1		1.20
826L	268P	3/8	रीत े		48	2	1 1/4	7 34	56	1		1.20
827J	269H		5%	34	4.9	2,3	1 1/2	8 1/2	11	1	6	1.38
827K	270X	ylσ			81	2 3	1 1/2	8 1/2	15	1	6	1.50
828J	271H	1/2	34	7/8	87	2 1/2	1 5%	9.54	34	1	15	1.80
829J	271X	9			63	215	1.7%	10	7/8	2	11	1.80
829K	273H			1	1 84	2 15	1 %	10	76	2	11	2.40
829L	274X	5%			154	2 1 5	1 7/8	10	7/8	2	11	2.70
830J	274H		7/8	1 1/4	1 35	3 1/4	2 1/8	10 %	1	3	5	2.70
830K	276H	34	1	1 14	1 32	3 %	2 1/8	10%	1	3	5	3.4
831J	277N		1 1/8		148	3 70	2 1/2	11 1/2	1 1/8	5	5	3.90
831K	277X	7/8			135	376	2 1/2	11 1/2	1 1/8	5	5	3.90
832J	277P		114		133	3 13	2 3/4	12 14	1,5	6		3.90
832K	278P	1	1 34		135	3 13	2 34	1234	1 3	6		4.80

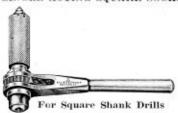
# RATCHETS

#### BILLINGS & SPENCER PACKER

The single-acting ratchet drill is so constructed that when the pressure is exerted on the handle the pawl is supported by the heavy drop forged frame of the ratchet. This prevents slippage and breakage, and relieves the strain on the drop forged pawl.

Because the ratchet drill is an emergency tool, the Billings Genuine Packer Ratchet Drills are built extra heavy and with wider bearings throughout. In an emergency one must have a tool which is dependable and durable, and equipment buyers realize that the slight additional cost of the Genuine Billings Ratchet Drills over the more cheaply constructed substitutes is very economical insurance. All the working parts in the Billings Ratchet Drills are hardened and tempered.

# SINGLE ACTING SQUARE SOCKET



Drop Forged Steel, Dull Black Finish, Working Parts Hardened.

Hardened.					
Nos	AE1	AE2	AE3	AE4	AE5
Length Handle, In.	10 3/2	13	16	18	20
Size Square Socket.	1	1	1	2	2
Length Head, In.	7 1/8	8	9 1/4	9 34	10%
Feed, In	2 1/4	2 1/2	3	3 1/2	4
Weight Each, Lbs.	4 %	6 1/2	9.34	11 1/2	15 %
Each ,	810.50	13.50	16.00	19.00	23.00
	One	in a Box	C.		

# SINGLE ACTING TAPER SOCKET



Drop Forged Steel, Dull Black Finish, Working Parts Hardened.

Nos	AG1	100	4.00	
		AG2	AGS	AG4
Length Handle, In.	10 1/2	13	16	18
Size Taper Socket	1	2	3	4
For Morse T. S. Drills				
Inches	1 to 3	15 to 33	器 to 1 ¼	117 to 2
Length of Head, In.	6 7/8	7.3%	9 14	1034
Feed, In	1 34	2	2.34	2 34
Weight Each, Lbs	5	6 36	9 1/2	11
Each		16.00	20.00	25.00
	One in	a Box.		

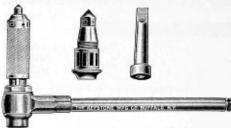


For Square Shank Drills
Drop Forged Steel, Dull Black Finish, Working Parts

Hardened.	HOLKING	Laite
Nos	AF1	AF2
Length Handle, Inches	10 %	13
Size Square Socket	1	1
	4 %	5
	1 14	1 %
Weight Each, Lbs	3 %	5 14
Each	89.00	10.50
One in a Box,		

# RATCHETS

# KEYSTONE REVERSIBLE COMBINATION



Ratchet for Taper Shank Twist Drills, Sleeve for Square Shank Drills and Short Boiler Socket for Square Shank Drills.

Steel Tubing Handle with Rod for Reverse Motion.

One in a Box.

#### RENSHAW



No. 1 has one collet for square shank drills to 1/2 inch

and one collet fitting No. 1 Morse taper socket.

No. 3 has one collet, for square shank drills, and 3 collets, Nos. 1, 2 and 3 for Morse taper shanks. Collets are held in the spindle by screw thread. Nos. 1 and 2 collets fit No. 3 socket.

The No. 3 ratchet, for boiler-makers, is provided with an extended feed-screw, having a knurled shank 3½ in. long. When this extended screw is substituted for the regular one, the price is not changed; if it is taken as an extra attachment, it is \$3.50.

Nos	9 1/2	3 18
Depth from Top Feed Screw to Bottom of Collet, Inches	2 1/2	5
Length of Feed, Inches Each, Complete	\$11.00	2 % 15.00

One in a Box.



# DRILLING POSTS

ARMSTRONG

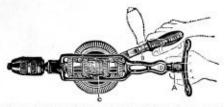
For Use with Ratchet Drills, Drop Forged Steel

Foot and Arm are Drop Forged. The finished steel post is screwed into foot and can be easily removed for packing in tool kit. Each Drilling Post is boxed separately.

Nos	8	10	12
Height Post, In.	16	20	26
Diam. of Post, In.	1	1 1/4	11/2
Arm Radius, In.	8	10	12
Each	86 00	8 00	10 00

# BREAST DRILLS

MILLERS FALLS



# Ratchet, Auxiliary Breast Plate, Ball Thrust Bearing

Black Enameled Iron Frame, Nickel Plated Parts, Right and Left and Continuous Ratchet, Two Speeds Even and 2 % to 1 Double Gear Drive, Adjustable Crank Handle.

No. 97-171/2 in Long, Three Jaw Chuck Holding 0 to 1/2 in. Round Shanks, Weight Each 8 1/4 Lbs. \$11.65 One in a Box.



## Ratchet, Auxiliary Breast Plate, Ball Thrust Bearing

The same as No. 97 in every particular, except has Master Two Jaw Chuck. The advantage of this type of Chuck lies in the Patent Milled Forged Steel Jaws that hold Bit Stock or Round Shank from 1/8 to 1/2 in., and No. 1 Morse Taper Shanks.

No. 87-17 in. Long. Weight Each 8 Lbs......\$10.90 One in a Box.



With Three Jaw Chuck

Black Painted Malleable Iron Frame, Red Painted, Large Gear, Black Painted Breast Plate and Crank, Cut Gears, Steel Small Gears, Changeable Speed from 1 1/2 to 1 and 4 to 1, Adjustable Breast Plate, Auxiliary Side Handle, Stained Hardwood Handles,

No. 2100-17½ in. Long, Three Jaw Chuck Holding 0 to ½ in. Round Shanks, Weight Each 6 Lbs. . . . . . . . . . . . . . . . . One in a Box.



# Level Attachment, Ball Thrust Bearing

Black Enameled Malleable Iron Main Stock and Breast Plate, Red Enameled Large Gear, Nickel Plated Parts, Adjustable Breast Plate Extension Crank, Cut Gears, Large Gear with Idler Roll to Equalize Bearings, Changeable Speed from Even to 3 to 1.

No. 118-17 1/2 in. Long, Three-Jaw Chuck, Holding 0 to 1/2 in. Round Shanks, Weight Each 6 1/2 Lbs. . \$7.50 One in a Box.

# BREAST DRILLS

MILLERS FALLS



# With Level Attachment, Ball Thrust Bearing

Black Enameled Malleable Iron Main Stock, Green Painted, Large Gear and Adjustable Breast Plate, Nickel Plated Parts, Cut Gears, Large Gear with Idler Roll to Equalize Bearings, Ball Thrust Bearing, Extension Crank with Radius from 4 to 6 in., Changeable Speed from Even to 3 to 1, Cocobolo Handles.

No. 12-171/2 in. Long, with Master Chuck Holding Round Shank from 1/4 to 1/2 in. Diameter, All Sizes of Bit Stock and No. 1 Taper Shanks, Wt. Each 6 1/2 Lbs. . . One in a Box.



With Two Speeds.

Black Cast Iron Frame, Rolled Steel Main Stock, Large Gear Painted Red, Cut Gears, Ball Thrust Bearing, Adjustable Breast Plate and Crank, Changeable Speed from Even to 3 to 1, Stained Hardwood Handles.

No. 19-18 in. Long, Barber Chuck Holding Bit Stock and Many Sizes of Round Shanks, Weight Each 6 One in a Box.



With Ball Thrust Bearings

Black Enameled Cast Iron Frame and Breast Plate, Rolled Steel Main Stock, Large Gear Enameled Red, Other Parts Polished, Adjustable Breast Plate, Changeable Speed from Even to 3 to 1, Stained Hardwood Handles,

No. 120-15% in. Long, Three Jaw Chuck, Capacity 0 to 1/2 in. Round Shanks, Weight Each 5 1/4 Lbs. \$3.75 One in a Box.



For Home or Light Work

Black Enameled Cast Iron Frame and Breast Plate, Large Gear Enameled Red, Adjustable Breast Plate, Single Speed, Stained Hardwood Handles.

No. 112-15 in. Long, Barber Chuck for Bit Stock One in a Box.

Each

# BREAST DRILLS

GOODELL-PRATT



Two Speed, Right and Left Hand Ratchet

Aluminum Alloy Frame, Ebony Enamel Finish, Large Gear Enameled Red, Saddle Design Leather Strap Breast Plate, Steel Gears and Pinions, Ball Bearing.

Changes of speed and changes of motion are both made by turning dial on back of frame. Give fast and slow, right or left hand ratchet or direct motion.

One in a Box.

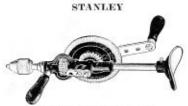


With Changeable Gears

Black Iron Frame, Red Large Gear, Cut Teeth, 2 Speeds, Lathe Turned Spindle with Hardened End Running in Hardened Steel Cone Bearing, Steel Pinions, Adjustable Breast Plate, Hardwood Handles.

No. 6-16 in. Long, Three-Jaw Chuck Holding 0 to ½ in. Round Shanks, Weight Each 5 Lbs....\$6.20

One in a Box.



With Three Jaw Chuck

Black and Orange Enameled Malleable Iron Frame, Adjustable Breast Plate, Cocobolo Handles, Level Set in Frame, Changeable Speed.

No. 731—18 in. Long, Three Jaw Chuck Holding 0 to ½ in. Round Shanks, Weight Each 5 ½ Lbs....\$6.50

One in a Box.



With Universal Chuck

Black and Orange Enameled Malleable Iron Frame, Adjustable Breast Plate, Cocobolo Handles, Level Set in Frame, Changeable Speed.

# BREAST DRILLS

YANKEE DOUBLE SPEED, BALL BEARING



With Right and Left Hand and Continuous Ratchet Movement

Dead Black Finished Malleable Iron Frame, Adjustable Ball Bearing, Steel Spindle, Cut Gears, Adjustable Breast Plate.



With Right and Left Hand and Continuous Ratchet Movement

Dead Black Finished Malleable Iron Frame, Adjustable Ball Bearing, Steel Spindle, Cut Gears, Adjustable Breast Plate. Each

No. 555-18 in. Long, Nickel Plated Two-Jaw Chuck for Bit Stock or Round Shank Drills, Weight Each 6 & Lbe

YANKEE SINGLE SPEED, BALL BEARING



With Right and Left Hand and Continuous Ratchet Movement

Dead Black Finished Malleable Iron Frame, Adjustable Ball Bearing, Steel Spindle, Cut Gears, Adjustable Breast Plate. Each



With Right and Left Hand and Continuous Ratchet Movement

Dead Black Finished Malleable Iron Frame, Adjustable Ball Bearing, Steel Spindle, Cut Gears, Adjustable Breast Plate. Each

No. 550-18 in. Long. Nickel Plated Two-Jaw Chuck, for Bit Stock or Round Shank Drills, Weight

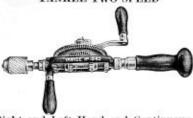
One in a Box.

# HAND DRILLS

YANKEE

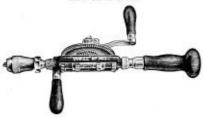
These Drills can be adjusted to different workings by a shifter on the cylinder, with slide in first notch the tool is a Plain Drill; in second, a Left Hand Ratchet; in third, a Right Hand Ratchet; in fourth, a Double Ratchet; in fifth. Drill is locked to adjust chuck.

YANKEE TWO SPEED



With Right and Left Hand and Continuous Ratchet Movement.

Dead Black Finished Malleable Iron Frame, Adjustable Ball Bearings, Steel Spindle, Cut Gears, 4½x2½ in. Detachable Polished Hollow Hardwood Handle. Each



With Right and Left Hand and Continuous Ratchet Movement,

Dead Black Finished Malleable Iron Frame, Adjustable Ball Bearings, Steel Spindle, Cut Gears, 4½x2½ in. Detachable Polished Hollow Hardwood Handle. Each No. 545—16½ in. Long, Nickel Plated Two-Jawed

YANKEE RATCHET, SINGLE SPEED



With Right and Left Hand and Continuous Ratchet Movement.

Dead Black Finished Malleable Iron Frame, Adjustable Ball Bearing, Steel Spindle, Cut Gears, 4x1½ in. Detachable Hardwood Handle. Each



Right and Left Hand and Continuous Ratchet Movement.

Dead Black Finished Malleable Iron Frame, Steel Spindle, Cut Gears, 4x1½ in. Detachable Hollow Hardwood Handle.

Each

# HAND DRILLS

YANKEE SINGLE SPEED



With Right and Left Hand and Continuous Ratchet Movement.

Dead Black Finished Malleable Iron Frame, Steel Spindle, Cut Gears, 4x1½ in. Detachable Hollow Hardwood Handle.

No. 1530-101/2 in, Long, Three-Jawed Chuck Hold-

Each

One in a Box.

#### YANKEE RADIO



Specially Designed for Radio Work.

Enameled Large Gear, Other Parts Plated, Stained Hardwood Handle, 4 to 1 Ratio of Gears.

Each

No. 1431—9½ in. Long, Three-Jawed Chuck Holding 0 to 32 in. Round Shanks, Weight Each 1½ Lbs. \$3.25 One in a Box.

#### MILLERS FALLS



#### Without Drill Points.

Solid Steel Frame, Red Large Gear, Nickel Plated Parts, Cut Gears, Steel Pinion, Stained Hardwood Handles, Hollow End Handle with Screw Cap, Detachable Side Handle Each

No. 303—11¼ in. Long, Three-Jaw Chuck Holding 0 to ¼ inch Round Shanks, Weight Each 1½ Lbs.\$2.85 One in a Box.



#### With Drill Points.

Long Black Enameled Malleable Iron Frame, Red Painted Large Gear with Wide Rim to be Grasped Between Thumb and Fingers when Delicate Work is Being Done, Nickel Plated Parts, Cut Gears with Idler Gear to Equalize Bearings, Ball Thrust Bearing, Hardwood Handles, Hollow End Handle with Screw Cap Containing Eight (35 to 54 inch) Drill Points. Detachable Side Handle.

Eac

No. 5—12½ in. Long, Three-Jawed Chuck Holding 0 to 15 in. Round Shanks, Weight Each 1¾ Lbs. \$3.70 One in a Box.

# HAND DRILLS



#### Solid Steel Frame

Large Gear Red Enameled, other parts Polished, Single Speed, Steel Pinions, Cut Gears, Stained Hardwood Handles, Idler Pinion to equalize bearings. Solid Main Handle, Detachable Side Handle, Each

No. 7—12½ in. Long, Three-jaw Chuck, Holding Round Shanks 0 to 3½ in., Weight Each 2 Lbs...\$3.65 One in a Box.



With Drill Points

Black Enameled Malleable Iron Frame, Red Large Gear, Nickel Plated Parts, Cut Gears with Adjustable Friction Roll to Equalize Bearings, Steel Pinion, Hardwood Handles, Hollow End Main Handle of Cocobolo with Screw Cap Shaped so Tool may be Used as a Breast Drill and Containing Eight (1/2 to 1/4 in.) Drill Points. Detachable Side Handle.

#### Ball Thrust Bearings

Fach

No. 2—14½ in. Long. Three-Jawed Chuck Holding 0 to ¾ in. Round Shanks, Weight Each 3½ Lbs.. \$5.35 One in a Box.



Ball Thrust Bearing

Black Enameled Malleable Iron Frame, Red Large Gear, Nickel Plated Parts, Changeable Speed, Inclosed Steel Pinions and Shifting Device, Cut Gears with Adjustable Friction Roll to Equalize Bearings, Stained Hardwood Handles, Detachable Hollow End Handle Shaped so Tool may be used as Breast Drill, Detachable Side Handle. Each



# Ball Thrust Bearing, Right and Left Hand Ratchet

Black Enameled Malleable Iron Frame, Red Large Gear, Nickel Plated Parts, Changeable Speed, Inclosed Steel Pinions and Shifting Device, Cut Gears with Adjustable Friction Roll to Equalize Bearings, S'ained Hardwood Handles, Detachable Hollow End Handle Shaped so Tool may be used as a Breast Drill, Detachable Side Handle.

# HAND DRILLS

GOODELL-PRATT



#### Without Drill Points

Black Iron Frame, Red Gears, Machine Cut Gears and Pinion, Solid Hardwood Handle, Nickel Plated Parts, Gears held in Mesh by Hardened Steel Guard.



#### Without Drill Points

Japanned Malleable Iron Frame, Red Enameled Large Gear, Nickel Plated Cut Teeth, Solid Polished Hardwood Handle, Removable Polished Hardwood Side Handle Each



Without Drill Points

Black Enameled Malleable Iron Frame, Red Enameled Large Gear, Ball Bearing Lathe Turned Steel Spindle, Double Gears, Cut Teeth, Two Speeds, Hollow Polished Cocobolo Handle with Screw Cap.

# FEED FRAMES

#### GOODELL-PRATT AUTOMATIC

For Use with Goodell-Pratt Breast Drills No. 6
Black Enameled Iron Parts, Steel Parts Polished.

When Breast Drill is fastened in this device by means of the three screws provided, it is converted into a Bench Drill with Automatic Feed.

Two different ratios of feed can be obtained by turning an adjusting screw provided for that purpose; combined with the two speeds on the Breast Drill, this makes four different feeds available.

The Automatic Feed can be instantly thrown out and the table raised or lowered by the hand feed.



# BENCH DRILLS

MILLERS FALLS



Ball Thrust Bearings, Automatic Feed with Two Grades of Positive Feed, Instantaneous Change of Speed, Speeded Even and 312 to 1.

Cast Iron Frame, Large Gear and Table; Steel Pinions, Feed Screw, Spindle and Chuck; Cast Iron Parts Painted Dark Gray Except Machined Parts, Large Gear Painted Red.

Each No. 216—Height Above Bench 22 in., Height Over All 28 in., Traverse of Automatic Feed 2 1/8 in., Distance from Standard to Drilling Point 3 % in., Distance from Table to Chuck

When Bottom of Table Bracket is Flush with the Bottom of Standard 8 in., 7 ½ in. Diameter Machined and Slotted Table, Vertical Adjustment of Table Bracket 5 % in., Vertical Adjustment of Table in its Bracket 21/2 in., Adjustable Crank with Radius from 3 to 61/2 

One in a Box.

#### MILLERS FALLS HAND FEED

With Two Speeds

A rigid, strongly built and accurate drill and thoroughly efficient hand feed drill.

Iron frame, enameled black, large gear table, two speed ratios 11/2 to 1 and 4 to 1 instantly changed, cut gears, steel pinions. extensible crank 3 to 6 in. radius, steel feed screw and chuck, large gear enameled red.

No. 210-Height Over All 24 in., Maximum 9 in. from Table to Chuck, Table and Other Machined Parts Polished, Weight 27 1/2 Lbs.... \$15.00





# MILLERS FALLS UNIVERSAL

Swivels to Any Position, Clamps at Any Height

Hand Feed, Steel Post and Feed Gears, Japanned Iron Frame, Two Speeds, Three-Jaw Chuck, Capacity 0 to 1/2 in. Extension Crank, Ball Bearing.

No. 21-Height of Standard 24 in., Weight Each 21 Lbs. One in a Box.

# BENCH DRILL VISES

MILLERS FALLS

For No. 216 Bench Drill

Each No. 217-With Swivel Jaw, Opens 2 % in., Width of Jaw 2 % in., Weight 



For No. 210 Bench Drill No. 219-Without Swivel Jaw, Opens 1 % in., Width of Jaws 21/4 in., Weight Each 4 Lbs.......\$2.70

# BENCH DRILLS

YANKEE, BALL BEARING

With Automatic Friction and Ratchet Feeds

Dead Black Finished Frame, Nickel Plated Chuck, Complete with Wrench, Steel Spindle, Steel Chuck with Hardened Jaws, Gears Cut from the Solid Metal, Steel Feed Screw with Ball Bearings at End, Tempered Wearing Parts.

No. 1003—Single Speed, Traverse of Automatic Feed 1½ in., Diameter of Table 4¾ in., Adjustment of Table in Bracket 1¼ in., Adjustment of Bracket 2¾ in., Extends Below Top of Bench 4¼ in., Extends Above Top of Bench 14½ in., Length Over All 18¾ in., Chuck Holds up to 14 in., Wt. Each 20 Lbs. . . \$16.50

No. 1005-Double Speed, Traverse of Automatic Feed 2 in., Diameter of Table 6% in., Adjustment of Table Bracket 1% in., Adjustment of Bracket 5 in., Extends Below Top of Bench 6 in., Extends Above Top of Bench 22 in., Length Over All 28 in., Chuck Holds up to 1/2 in., Weight 

One in a Box.

# POST DRILLS

SILVER







No. 21.

No. 22.

No. 23.

#### With Ball Bearings and Intermediate Gears

Adapted for small Repair Shops, Garages, etc. Steel Spindle and Shaft. Table moves up or down or to either side. All bearings are bored out of solid metal and reamed to a working fit. Perfect mesh machine moulded gears are used.

v -	21	22	23
Nos.	38	48	50
Height, Inches	33	4.0	
Diameter of Spindle, In	1	1	1 1/8
Run of Spindle, Inches	3	3 3/4	4
Diameter of Column, Inches	1 %	1 //2	2
Spindle to Table, Inches	10	13	1.6
Drills Holes to, Inches	1	1 14	1 3/2
Drills to Center of Circle, Inches.	12	15	18
Chinaina Weight I be	7.5	110	165
Shipping Weight, Lbs	815.50	18.50	27.00
Each	\$19.00	15.50	21.00

Spindles of these drills are bored for ½ in. round shank

# CHAIN DRILLS

MILLERS FALLS



#### Ball Bearing.

Black Japanned Malleable Iron Frame, Polished Three-Jaw Chuck, Protected Springs, 4 ft. Chain, Each

No. 719—Capacity 0 to ½ in. Round Shank, Length with Chuck 11 ¼ in., Weight Each 4 ½ Lbs.... \$5.20

An auxiliary tool for use with breast drill or brace when extra power is needed or when pressure cannot be easily applied. The drill is automatically fed into the work by an adjustable friction feed.

One in a Box.

#### MILLERS FALLS



#### Ball Bearing.

Japanned Frame, Nickel Plated Sockets and Bit Shanks, Complete with 4 ft. of Stout Chain.

No. 718—Length with Chuck Inserted 11½ in., with Plain Socket with ½ in. Hole and Set Screw, Also Master Chuck for Holding Round Shanks from ½ to ½ in. Diameter, Bit Stock and No. 1 Morse Taper Shank, Weight Each 4½ Lbs. \$4.95

This is an auxiliary tool for use with breast drill or bit brace, when extra power is needed or where pressure cannot be easily applied. The drill is automatically fed into the work by an adjustable friction feed which is automatically regulated by the resistance the drill encounters. Reverse movement of the brace withdraws drill.

One in a Box.

# YANKEE



#### With Automatic Friction and Ratchet Feed.

Japanned Malleable Iron Frame, Ball Bearing Steel Screw.

The distinguishing feature of the Yankee Chain Drill is its convenience and rapidity of operation and automatic friction and ratchet feed. The taking up and releasing of chain is done in a moment with a friction feed by simply turning brace or breast drill by which chain drill is operated.

One in a Box.

# ELECTRIC DRILLS

VAN DORN ¼ INCH



#### With Automatic Switch

A sturdy, serviceable tool of proper power, weight and speed for drilling the hundreds of smaller holes needed for service repairs and for mounting accessories.

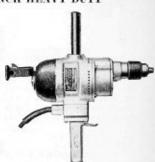
Each

No. 8100—14 in. Capacity, 11%, in. Long, D. C. or A. C. 60 Cycles, Speed 1500 R. P. M., Full Load 800 R. P. M., Grip Handle, Three-Jaw Chuck, 10 ft. Cable and Plug, Weight Each 6 Lbs....\$30.00

#### VAN DORN 1/2 INCH HEAVY DUTY

#### With Automatic Switch.

Delivers more power per pound than any other Universal Drill, Combination Spade and Breast Plate Handle, Three-Jaw Chuck. Each



## VAN DORN 56 INCH

# With Automatic Switch.

For strenuous repair operations or truck maintenance or any work where extraordinary reserve power is required.

Combination Spade and Breast Plate Handle, Three-Jaw Chuck.

Each

One in a Box.

Note—The Above Drills are for use on 110 Volts, They can also be furnished for 220 or 32 Volts at \$4.00 Additional.

# BENCH DRILLING STANDS

VAN DORN

For Use with ½ in. or 5% in. Van Dorn Electric Drill.

The Drill is attached to the Stand by means of an adapter plate which holds it rigidly in place. The tension spring lifts the drill out of the work instantly when the handle is released.



# ELECTRIC GRINDERS

VAN DORN, BENCH

Not a Universal Motor. Specify your Current when ordering. Regularly furnished for 110 Volt Single Phase.

#### 6 INCH



Complete with two Grinding Wheels, Adjustable Tool Rests, Wheel Guards, Switch and Cable ready for use.

Guards can quickly be adjusted so that front end of Guard is always close to the Grinding Wheel.

#### 110 Volt, Single Phase, 60 Cycle

Each

No. 7000-6x1/2 in. Wheels, Speed 3600 R. P. M., 

#### SINCH

Complete with two Grinding Wheels, Adjustable Tool Rests, Wheel Guards, Switch and Boss for Twist Drill Grinding Attachment, fully enclosed ½ H. P. Motor. Ball Bearings properly mounted in dust-proof housings.



#### 110 Volt, Single Phase, 60 Cycle

No. 7900-8x 1/4 in. Wheels, Speed 3600 R. P. M., 

# 8 INCH PEDESTAL TYPE



Complete with two Grinding Wheels, Adjustable Tool Rests, Wheel Guards, Switch and Boss for Twist Drill Grinding Attachment, fully enclosed 1/2 H. P. Motor, Ball Bearings properly mounted in dust-proof housing.

# 110 Volt, Single Phase, 60 Cycles

Each

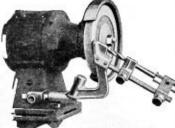
No. 7900M-8x34 in. Wheels, Speed 3600 R. P. M., Height from Floor to Shaft 42 in., Weight Each 160 

Any of the above grinders can be furnished 110 volt, 25, 40 or 50 Cycle A. C.; 32, 115 and 230 Volt D. C. and for 220 Volt Single Phase Current at \$4.00 additional.

# TWIST DRILL GRINDING ATTACHMENT

# For 8 Inch Grinders

Quickly mounted to Boss provided for that purpose on the Van Dorn Inch Grinder. Will sharpen twist drills up to % in. Micrometer adjustment insures equal cutting edges. Special recessed wheel for twist drill grinding furnished with the attachment.



Each No. 7980-Weight Each 81/4 Lbs......\$36.00

# ELECTRIC HAMMERS

SYNTRON



Works on Any Lamp Socket

Only One Moving Part.

No Motor.

Only the Piston Moves.

One Man can Carry it.

The Syntron Electric Hammer is a portable electric tool having only one moving part-the piston, which moves back and forth in a bronze barrel 3600 times a minute. Striking 3600 blows a minute, the Syntron Electric Hammer enables one man to do the work of ten in drilling or chipping in masonry. It drills 3 in, a minute into concrete, operating from any light socket. When direct current only can be obtained, a rotary converter can be furnished. It is motorless and gearless. It cannot be stalled or overloaded.

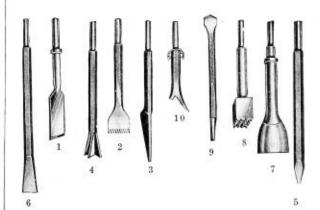


## Complete Outfit

Syntron Hammers are furnished complete with Carrying Cases, Control Box, Rotating Wrench, Tool Chuck, Double End Socket Wrench, 15 ft. of Hammer Cable and 50 ft. of Cord with Attachment,

Type F-11 in. Long, 31/2 in. Diameter, Drilling Capacity 1 in., Weight Each 17 Lbs....... 200.00 Type B—13½ in. Long, 5 in. Diameter, Drilling Capacity 1 1/2 in., Weight Each 26 Lbs..... 250.00

# BITS FOR SYNTRON HAMMERS



No. 1-Mortar Chisel, No. 2-Tooth Chisel.

No. 3-Cape Chisel.

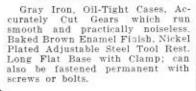
No. 4-Star Drill. No. 5-Stone Point. No. 6-Cold Chisel. No. 7-Brick Chisel. No. 8-Bush Hammer No. 9-Diamond Point, No. 10-Beading Tool.

Prices on Application.

# TOOL GRINDERS

NIAGARA

#### With Carborundum Wheels



In workmanship, design and mechanical construction, these Grinders are in a class all their own. Every part is accurately made and carefully assembled.

Nos	1	2	3	4
Size Wheel, Inches	4 x 1	5x1	6x1 14	7x1 14
Weight Each, Lbs	7	7.3%	11 %	14 1/8
Each	85.75	6.50	9.50	11.00

One in a Box.

#### BLUE KNIGHT

#### With Carborundum Wheels

Blue Enameled Iron Case, Machine Cut Gears, Steel Pinion, Adjustable Tool Rest.

These Grinders are serviceable, well made and carefully assembled and are much better than the average low priced machines.



Nos	A	В	C
Size Wheel, Inches	4x1	5x1	6x1
Weight Each, Lbs	4 1/8	6 34	9 3
Each	83.50	4.75	6.50

One in a Box.

#### HANDY ANDY



# With Vitrified Wheels

Durable Red Enameled Iron Case, Helical Gears Machine Cut. Run Smooth and Quiet, Vitrified Grinding Wheels of Excellent Quality, Fast and Cool Cutting, Equipped with Standard Steel Tool Rest, Pressed Steel Crank Arm and Positive Acting Clamp Screw. The Pyroxylin Enamel Finish Adds Greatly to the Appearance of the Machine.

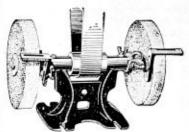
Nos	HA1	HA2	HA3	HA4
Size Wheel, Inches	4x1	5x1	6x1	7x1
Weight Each, Lbs	4	6 1/2	9	10 1/2
Each	82.50	3.00	4.50	5.00

These are well made machines designed especially for light grinding and sharpening around the shop, home and garage.

One in a Box.

# POWER TOOL GRINDERS

DIMO-GRIT



Iron Frame, Black Baked Enamel

Mechanical Construction—Diameter of Shaft ½ inch. Diameter of Arbor Hole in Wheels 1 inch. Diameter of Pulley 1½ in. Width of Pulley 2½ in. Length of Shaft 12 in. Distance between Wheels 8 in. Height of Shaft Above Bench

4 in. Bench Space Required 5x7 ½ in. Recommended Speed 2546 R. P. M. Maximum Speed 3183 R. P. M.

Regular Equipment—Two Adjustable Work Rests and One Medium and One Coarse Dimo-Grit-Wheel.

No. 306—6x1 %x1 in, Wheels, Weight 20 Lbs......88.00

One in a Box.

A very substantial grinder for light work. The bearings are plain and are bored and reamed in solid metal, The shaft is of steel, accurately machined, finished and fitted.

Equipped with 1 tight pulley.

# GRINDING HEADS

GOODELL-PRATT

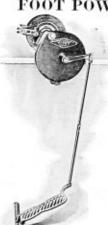
Without Wheels

Black Enameled Iron Frame, Red Trimmings, Steel Parts Polished, Hollow Base, Spindle Holes Reamed and Counterbored, both Collars and Spindle are Lathe Turned, Provided with Adjustable Boxes, Brass Screws, and Caps.

Red ned, ned and ded dews

One in a Box.

# FOOT POWER ATTACHMENTS



For Use with Niagara Grinders

These attachments are simple and Powerful and can be used to advantage where electric or other power is not available. They are made of malleable iron and are readily adjustable to several heights.

No.	20—For	Use on N	To. 3
	Grinder		83.00

# CARBORUNDUM AND ALOXITE GRINDING WHEELS



Carborundum—Carborundum is an artificial abrasive—a manufactured material. It is a chemical combination of the two elements silicon and carbon.

To the extreme hardness of carborundum is attributed its great durability and this property combined with its sharpness makes it an ideal abrasive or sharpening material. It is a product of the electric furnace. Gray in color,

Aloxite—Aloxite is also a product of the electric furnace. It is made by fusing bauxite, a highly aluminous clay in an electric arc furnace. Cuts fast, cool and clean. Brown in color.



In Ordering Always State Whether Carborundum or Aloxite Wheel is Wanted.

#### STANDARD LIST OF GRINDING WHEELS

#### PRICES EACH

Diam.						Thicknes	s of Whee	els, in In	ches.				
in Inches	34	3%	1/2	54	3/4	₹6	1	11/4	1 1/2	1 ¾	2	2 1/4	2 1/2
2	\$0.80	\$0.90	\$1.00	\$1.10	\$1.20	81.30	81.40	81.60	81.80	82.00	\$2.20	\$2.35	\$2.55
2 14	.90	1.05	1.15	1.25	1.35	1.45	1.55	1.80	2.00	2.25	2 45	2.70	2.90
3	1.00	1.15	1.25	1.40	1.50	1.65	1.75	2.00	2.25	2.50	2.75	3.00	3.25
3 14	1.15	1.30	1.45	1.60	1.70	1.85	1.95	2.25	2.50	2.80	3.05	3.35	3.60
4	1.40	1.50	1.70	1.85	2.00	2.20	2.35	2.70	3.00	3.35	3.70	4.10	4.45
4 14	1.60	1.75	2.00	2.20	2.35	2.60	2.80	8.20	3.55	3.95	4.35	4.80	5.20
5	1.80	2.00	2.30	2.50	2.70	2.95	3.20	3.65	4.10	4.55	5.00	5.45	5.90
6	2.30	2.60	2.90	3.20	3.50	3.80	4.10	4.70	5.30	5.90	6.50	7.10	7.70
6	2.75	3.15	3.55	3.90	4.30	4.75	5.15	5.85	6.70	7.50	8.25	9.00	9.85
8	3.25	3.75	4.25	4.75	5.30	5.75	6.25	7.25	8.30	9.30	10.30	11.30	12.35
9	3.70	4.35	5.00	5.60	6.25	6.80	7.45	8.70	10.10	11.40	12.70	14.00	15.25
10	4.30	5.15	5.90	6.70	7.45	8.20	9.00	10.50	12.25	14.00	15.75	17.50	19.25
12	5.50	6.20	7.25	8.25	9.35	10.40	11.50	13.75	15.75	17.85	20.00	22.35	24.75
14			9.30	10.80	12.30	13.80	15.25	18.25	21.20	24.20	27.15	30.35	33.60
16					15.75	17.75	19.75	28.75	27.70	31.70	35.70	39.60	43.55
18							24.45	29.40	34.50	39.50	44.50	49.20	53.90
20			or conserve	ELECTION.		- CONTRACTOR	CHINASPONE	36.10	42.00	47.85	53.75	59.40	65.00
22								44.45	51.60	58.75	65.90	73.00	80.00
24								53.00	61.00	70.00	78.00	87.00	95.00

#### State Grade and Grain When Ordering.

Always Give Diameter and Thickness of Wheels Wanted, Also the Size of Arbor Hole and State Principle Purpose for which the Wheel is to be Used.

# EMERY WHEEL DRESSERS

# HUNTINGTON PATTERN



# Hooded.

Japanned Iron Handle, Complete with Two Sets of Cutters.

One in a Box.

# EXTRA CUTTERS FOR EMERY WHEEL DRESSERS

#### Hardened Steel, Polished.

No. 1C—Cutters, 5 Wheel Sections, Weight Per 100 Sets 7½ Lbs...\$0.10

Open Stock.

#### DIAMO-CARBO



A Tube Filled Its Entire Length with an Abrasive Almost as Hard as Diamonds,

Used as a diamond or in connection with a diamond, materially reducing the cost of the latter. The adjustable collar forms a back-stop over the tool rest.

Nos	3	5	9	12
Length, Inches	10	12	12	12
Diameter, Inches	5%	56	3%	14
Each	83.50	4.00	4.00	4.00

Nos. 3 and 5 are the sizes best adapted for general use. Nos. 9 and 12 are used for small wheels.

One in a Box.



# MOUNTED GRINDSTONES



SAMSON

Roller Bearing

Painted Seasoned Hardwood Frame, Strongly Braced and Bolted, Berea or Lake Huron Stone, Complete with Treadle, Crank and Bucket Holder, Crank will Tighten Any Nut on Frame.

Nos	S150	S155	S160
Weight Stone, Lbs	100 to 110	70 to 80	40 to 50
Thickness Stone, In.	1% to 2%	1% to 2%	1 % to 2 14
Shipping Wt., Lbs	150	100	7.5
Each	816.50	15.00	14.00
Bushed Sto	nes Only, for	Samson Fran	ne

S160S S150S \$1558 Nos. Each ...... 89.25 8.50 8.00

# BI-TREADLE

Ball Bearing Steel Frame, Braced and Riveted, Coated with Black

Waterproof Paint.

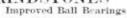
The power applied with the legs by means of duplex treadle, is nearly double that obtained with a crank, enabling the operator to run the stone at much higher speed and perform much better work.



No. B110-19 to 22 in. Diameter, Genuine Berea or Lake Huron Stone, 1 % to 2 ¼ in. Thick. Weight 50 to 60 Lbs., with Steel Seat, Clothes Protector and Drip Can, Weight Each Complete in 

Bushed Stones Only, for Bi-Treadle Frames Each 

# FAMILY GRINDSTONES





Selected Berea Grit Stone, Turned and Rubbed True, Mounted in an extra heavy Iron Trough, Pressed Steel Base, Fitted with Patent Hub, Steel Shaft and Ball Bearings.

Size, Inches	6	8
Wt. Each, Lbs	10	12
Each		4.50
Size, Inches	10	12
Wt. Each. Lbs	2.2	3.4
Each		6.00

#### GRINDSTONE FIXTURES COMMON

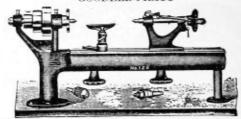


Cast Iron. Japanned

Double Wheel. Anti-friction Covered Bearings, two Iron Flanges. Adjustable Nut.

Length of Shaft, Inches	13
Weight Per Set, Lbs	5
Per Dozen Sets	820.00
Extra Cranks	
Extra Shafts	9.00

# AMATEUR BENCH LATHES GOODELL-PRATT



For Laboratories, Repair Shops and Trade Schools

Black and Red Enamel Finish, Polished Working Parts. This Lathe has a Milled Bed and a Tail Stock with a milled base. The Live Spindle has a cone bearing to take up wear, and is provided with a No. 1 Morse Taper Socket and has a 3s inch hole clear through. The Tail Stock has both Screw and Lever Feed. Tail Stock Spindle has a No. 0 Morse Taper Socket. The Cone Pulley has three Steps, 1½, 2 1/2 and 3 1/2 in diameter.

Every Lathe is provided with an adjustable Tee Rest, a Slotted Face Plate, a Saw Arbor and a Drill Chuck with a No. 1 Morse Taper Shank. The Chuck holds round shanks of all sizes from 0 to 14 in. Both the Head Stock and the Tail Stock are provided with Point Centers.

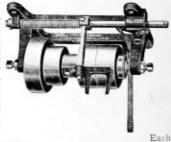
No. 125-Length Over All 25 in., Height 111/2 in., Swing 7 in., Extreme Distance Between Centers 12 in., Net Weight 30 Lbs...... No. 494-Length Over All 31 in., Height 111/2 in.,

Swing 7 in., Extreme Distance Between Centers 18 in., Net Weight 36 Lbs.... The No. 492 Lathe is furnished with extra large Tool Rest.

# COUNTERSHAFTS GOODELL-PRATT

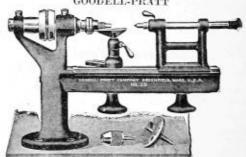
For Use with Amateur Bench Lathes

This Countershaft for with our Bench Lathes is so arranged that a treadle can be attached to the pull. The belt is held on the Tight Pulley as long as pressure remains on the treadle. Diameter of tight and loose pulleys, 2 % in. cone pulley has three steps, 1½, 2½ and 3½ in. in diam., 1¼ in. in width.



No. 130-Weight Each 10 Lbs... 812.00

# POLISHING LATHES GOODELL-PRATT



For Polishing, Grinding and Similar Operations

All iron parts except bearing surfaces are finished in red and black enamel; steel parts are polished.

Furnished complete with Tail Stock, Tee Rest, Face Plate, Saw Arbor and a Three-Jawed Chuck; capacity 0 to \$\frac{1}{2}\$ in. The Bed is milled its entire length. The Head Stock has a hollow spindle, Length of Bed 12 in. Extreme distance between centers, 3½ in. Swing 5 in. Width of Pulleys ¾ in. Diameter of Steps, 1 in. and 1¼ in. The large step is grooved so that round belt may be used if desired. Net weight 9 1/2 pounds. Each 

# POLISHING HEADS

GOODELL-PRATT

For Round or Flat Belt

Black Enamel Iron Frame with Red
Trimmings, Steel Parts Polished, Hollow
Base, Spindle Holes Reamed and Counterbored. Both Collars and Spindles are
Lathe Turned, Provided with Adjustable Boxes,

Each

No. 21-7 in High, 3g in Spindle, 8 in Long, Taper Threaded at Each End with Flange for Holding Wheel 34 in Thick,

One in a Box.

# With Drill Chuck

Black Enameled Iron Frame, Trimmed in Red, Steel Parts Polished, Hollow Base, Spindle Holes Reamed and Counterbored, both Collars and Spindles are Lathe Turned, Provided with Adjustable Boxes.



Each

# With Drill Chuck

Black Enamel Iron Frame with Red Trimmings, Steel Parts Polished.

No. 27—7 in. High, 9 in Steel Spindle with Taper Thread on One End and Flanges on the Other, Diameter of Spindle in the Bearing 34 in. Between Flanges where Wheel Runs 15 in.. Patent Oil Cups, Takes

# With Drill Chuck

Black Enameled Iron Frame with Red Trimmings, Steel Parts Polished. This machine has adjustable boxes and patent oil cups. It has two flanges for holding wheels up to 8 in. diameter and 1 in. face. For use with flat belt.



One in a Box.

# BUFFING WHEELS

LOOSE MUSLIN UNBLEACHED

Grade M



This grade is used for general work for both cutting and coloring. It is strong in body, yet flexible enough to get around the work easily. Only goods having large yarns of strong construction are used in this grade which decreases the space between the yarns and insures maximum wearing qualities. Eighteen ply, count 64x68, Weight 3.75 pounds.

Open Stock.

## STITCHED MUSLIN BLEACHED

Grade S. B.

A sewed buff of extra good quality, carefully built by the strip construction of strong heavy cotton cloth; is uniform in density, and is well balanced.

This material is carefully selected, uniformly graded, and the strips in alternate layers cross at right angles. Eighteen ply, regular standard sew-

Furnished 14 in, stitched with cone 14 in, apart or 35 in, stitched with 35 in. When ordering state which is wanted.



# FINE WIRE WHEEL BRUSHES

WIRE DRAWN

High Quality Steel Wire, Especially Tempered



These Brushes are used by Nickel and Electro Platers, Manufacturers of Art Metal Goods, Gas and Electric Fixtures, Band Instruments, Builders' Hardware and Saddlery Goods, Finishers of All Kinds of Metal.

The wire used in these Brushes is securely drawn into the hub in individual knots and is held in by Brass Wire. It is of a high quality and is drawn particularly for use in

these Brushes, with a temper especially adapted to this

Nos. Diameter, Inches Thickness of Wire, Inches Number of Rows Diameter of Block, Inches Weight Per Dozen, Lbs. Per Dozen	3 .003 3 1 3 1 <sub>2</sub>	2304H 3 .004 4 1 4 18.00	2353 H 3 ½ .004 3 1 ¼ 3 18.00
Nos. Diameter, Inches Thickness of Wire, Inches Number of Rows Diameter of Block, Inches Weight Per Dozen, Lbs. Per Dozen	2404 H 4 .004 4 1½ 5 824.00	2504 H 5 .004 4 2 9 30.00	2604 H  6 .004 4 2 L <sub>2</sub> 15 48.00

# DRILL CHUCKS ETTCO BALL BEARING





# Keyless, Hand Operated, Easy Release

Made of few parts. No springs or other small parts to be broken. No slipping of drill and no ruined drill shanks. The steel ball bearings are held in a retainer and cannot drop out when the chuck is taken apart. No keys necessary for adjusting, as the grip of the hand will tighten the chuck without any extra effort. The Ettco is the most practical and easiest working drill chuck on the market.

Nos	1A	2A	3A	3 34
Capacity, Inches	0 to 27	0 to 35	0 to 33	16 to 56
Outside Diameter, Inches		1 1 1 1	2.14	2 1/4
Length Open, Inches		2 %	3 14	334
Length Closed, Inches		3 3%	4 3%	4 34
Weight Each, Lbs		1 1/4	2 1/2	2 1/2
Each	85.50	6.50	9.00	11.00
One	in a Box			

# EXTRA ARBORS FOR ETTCO CHUCKS With Morse Taper Shanks

Nos		E2A	E3A	E3 1/2 A
Each		. 75	1.00	1.50
	With Rou	nd Shanks	,	
Nos	ches		. 1/2	E2S
Each			. \$1.00	1.00

# JACOBS GEARED SLEEVE





# Best Tool Steel Body and Parts, Polished, with Key

Direct Power, Bushed Keyholes, Unbreakable Tool Steel Keys, increased Tightening Power—Gear Teeth on Split Nut

Nos	1	2	3	4	5
Capacity, Inches	0 - 12	$0 - \tilde{\epsilon} 1$	0-11	3n - 34	34 - 1
Outside Diameter, In	1 3	144	2.5	2.7%	3 3%
Lgth., Jaws Extd., In	1 48	2 34	315	413	5-1/2
Lgth., Jaws Receded, In.	1 1/2	2-3	3	3 11	4 %
Wt. Ea. Less Key, Lbs.	1,4	74	2 1/4	4 3/4	6.75
Each	\$4.50	5.50	9.00	15.00	20.00
0	ne in a	Box.			



## WESTCOTT

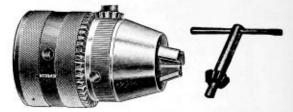
#### Polished Tool Steel Body, with Key

Straight Body, no projections. The Jaws and Screws are all within the body and are of the best Tool Steel, carefully hardened.

Nos		0LS 2 14	1LS	2LS 3 1/6
Capacity, Inches		0 to 1/2	0 to %	0 to 1
Each	88.00	9.00	10.00	11.00
	One in	a Box.		

# DRILL CHUCKS

STETSON GEARED

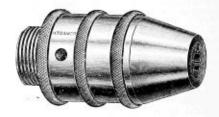


# Polished Tool Steel Body, with Key

The Toothed Sleeve and Key distinguishes it from and makes it superior to all others. By means of this key, a drill, tap or other tool can be easily and securely tightened. but as the action of the key differs from that of the ordinary spanner, in that it is not inclined to revolve the spindle. this chuck is far more convenient and effective than others. which require the use of one for tightening and the other for holding the spindle.

No. 281-Capacity 0 to 3 in., Weight Each 1 Lb... \$8.50 One in a Box.

# BEACH PATENT



No. 275-Hand Operated

Polished Tool Steel Body, Hardened Jaws.

Sizes		2	3	4
Capacity, Inches		0 to 3%	1 to 1/2	% to %
Weight Each, Lbs	34	1 1/4	2 %	4 3/6
Each	\$8.00	8.50	10.00	11.00
	One in	a Box		

# BEACH JEWELERS



# Polished Tool Steel Body.

This is a Light Weight Chuck intended for Jewelers and other light precision machines.

Each No. 275-O-Capacity 0 to 1/8 in., Weight Each 1/4 Lb. 88.00

# EXTRA JAWS FOR BEACH CHUCKS



When ordering Jaws to fit old chucks always send Chuck so that jaws can be fitted to it.

V.	0*0	N W	Per Set
vo.	276 -	-Not Hardened	\$0.90
VO.	276H -	-Hardened	. 2.10

# DRILL CHUCKS

# MILLERS FALLS STRAIGHT SHANK



#### Steel Shell, Knurled and Polished

Three Steel Jaws arranged to open and close with the loosening or closing of the chuck upon the spindle.

Nos	6	7
Capacity, Inches 0 to 1/4	0 to 3%	0 to 16
Shanks, Inches 2 ½ x ½	2 1/2 X 1/2	2 1/2 x 1/2
Outside Diameter, Inches 1	1 1/4	1 %
Weight Each, Oz 7	10	17
Each \$1.70	2.05	2.80
One in a Box.		

#### MILLERS FALLS BRACE SHANK



#### Steel Shell, Knurled and Polished

Three Steel Jaws arranged to open and close with the loosening or closing of the chuck upon the spindle.

Nos	15	16	17
Capacity, Inches	0 to 14	0 to 3/s	0 to 1/2
Length Shank, Inches	2	2 14	2 1/4
Outside Diameter, Inches	1	1 1/4	1 1/2
Weight Each, Oz	6	10	17
Each		2.15	2.80
One is	n a Box.		

# MILLERS FALLS TAPER SHANK



#### Steel Shell, Knurled and Polished.

Three Steel Jaws arranged to open and close with the

loosening or closing of the	списк ир	on the spindi	e.
Nos	1T5	2T5	1T6
Capacity, Inches	0 to 1/4	0 to 14	0 to 38
Morse Taper Shank No	1	2	1
Each	\$2.25	2.35	2.60
Nos	2T6	3T6	1T7
Capacity, Inches		0 to 3/8	0 to 1/2
Morse Taper Shank No	2	3	1
Each	\$2.75	3.30	3.40
Nos	2T7	3T7	4T7
Capacity, Inches	0 to 1/2	0 to ½	0 to 1/2
Morse Taper Shank No	2	3	4
Each	\$3.55	4.10	4.95
One i	n a Box.		

## YANKEE STRAIGHT SHANK



# Steel Body, Knurled and Nickel Plated

Three Hardened Tool Steel Jaws, 1/2 in. Diameter Round Steel Shank. Nos. . . . . . . . . 1594 1595 Capacity, Inches . . . . . . . 0 to 1/4 0 to 3% 0 to 1/2 1 1/2 Outside Diameter, Inches... 1 3/8 Length, Inches ..... 5 5 3% 12 18 2.30 3.00 One in a Box.

# DRILL CHUCK ARBORS

JACOBS TAPER SHANK



Accurately Ground on Centers, to Fit Any Model of Jacobs' Drill Chucks

Note—When ordering Arbors always give Taper Number also Number of Chuck for which Arbor is Required.

#### JACOBS STRAIGHT SHANK



Accurately Ground on Centers to fit Any Model of Jacobs' Drill Chucks

 Size Shank, Inches
 ½
 ‡

 Each
 \$0.75
 .75

Note—When ordering Straight Shank Arbors always state Size of Shank also Number of Chuck for which Arbor is Required.

#### MORSE TAPER SHANK



#### For Beach and Stetson Drill Chucks

Polished Steel with Nut. By turning nut one way chuck may be forced off the arbor and by turning it the other way may be drawn out of socket.

other way may be drawn out of socket.	
I	Each
No. 0-For No. 0 Beach Chuck, No. 1 M. T. Shank,	
3 % in. Long\$1	1.30
No. 1-For No. 1 Beach Chuck, No. 1 M. T. Shank,	
4 ½ in. Long	.30
No. 1A-For No. 1 Beach Chuck, No. 2 M. T. Shank,	
5 % in. Long 1	.40
No. 2-For No. 2 Beach, No. 2 Stetson and No. 2	
Stetson Geared Chucks, No. 2 M. T. Shank, 5 to	
in. Long 1	.40
No. 2A—For No. 2 Beach, No. 2 Stetson and No. 2	
Stetson Geared Chucks, No. 3 M. T. Shank, 512	
and many transfer to the contract of the contr	.75
No. 3-For Nos. 3 and 4 Beach Chuck, No. 3 M. T.	723
Shank, 6 1/4 in. Long	. 75
No. 3A-For Nos. 3 and 4 Beach Chuck, No. 4 M. T.	2072520
According to the control of the cont	2.25
No. 4-For Nos. 3 and 4 Stetson Chuck, No. 3 M. T.	
Shank, 6½ in. Long 2	2.00
No. 4A-For No. 3 and 4 Stetson, No. 4 M. T. Shank,	
7½ in. Long 2	1.50

# MORSE STRAIGHT SHANK



With Blank End, for Lathe Spindle
Eacl
No. 0-For No. 0 Beach Chuck, 4% in. Long, Shank
3 % x 1/2 in
No. 1-For No. 1 Beach Chuck, 61/2 in. Long, Shank
4 ½ x <sub>18</sub> in
No. 2-For No. 2 Beach, No. 2 Stetson or No. 2
Stetson Geared Chuck, 61/2 in, Long, Shank 41/2 X
7/8 in
No. 3-For Nos. 3 and 4 Beach Chuck, 61 in. Long,
Shank 4 ½ x1 in 1.43
No. 4—For Nos. 3 and 4 Stetson Chuck, 7 1/2 in. Long,
Shank 4 % x1 ¼ in 2.00

# MACHINISTS VISES

#### PARKER SUPERIOR



Stationary Base

Parkeo Metal, Slide Strengthened with Patented Solid Steel Bar, Extra Large Cut Screw and Nut.

A set screw and spring tension on the lever are placed at the head of the screw. This holds lever at any position desired and saves injuries caused by dropping of the lever.



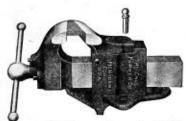
Swivel Base with Patent Tightening Stud

Renewable Special Tool Steel Faces, Milled and Fitted of the Jaws.

29X	39X	49X	59X
3 1/4	3 %	4 1/4	4 3/4
4	6	7	8
33 1/2	52	7.2	9.0
\$11.50	13.00	17.00	22.00
	69X	79X	79 16 X
	5 1/2	6 1/4	7
	9	9 1/2	103/2
	129	159	1931/2
	\$33.00	45.00	55.00
	3 ½ 4 33 ½ \$11.50	3 ½ 3 ¾ 4 6 33 ½ 52 \$11.50 13.00 	3 ½ 3 ¾ 4 ¼ 4 ¼ 6 7 3 3 ½ 52 72 811.50 13.00 17.00 69X 79X 5 ½ 6 ¼ 9 9 ½ 129 159

Renewable Special Tool Steel Faces, Milled and Fitted to the Jaws.

Nos	229X	239X	249X	259X
Width Jaws, Inches	3 14	3 34	4 1/4	4 %
Jaws Open, Inches	4	6	7	8
Weight Each, Lbs	39	60 1/2	841/2	10236
Each	\$15.00	17.00	21.00	27.50
Nos		269X	279X	279 14 X
Width Jaws, Inches		5 1/2	6 1/4	7
Jaws Open, Inches		9	9 1/2	1036
Weight Each, Lbs		151	187	228
Each		\$42.00	60.00	70.00



Stationary Base, Swivel Jaw

Parkco Metal, Solid Steel Bar, Reinforced Slide, Set Screw and Spring Tension on Lever, Renewable Tempered Tool Steel Faces.

Nos	370	371	37136	372
Width Jaws, Inches	3	3 1/2	4	4 1/2
Jaws Open, Inches	3 14	5	r r	6
		0.70		7.00
Weight Each, Lbs	2.5	4.0	4.1	59
Each	\$15.00	16.00	19.00	22.00
Nos		373	374	375
Width Jaws, Inches	# 24230 DESPOYED	5	5 1/2	6
Jaws Open, Inches		7	9	9 1/2
Weight Each, Lbs		73	99	149
Each		\$28.00	35.00	50.00

# PARKER VICTOR

These Vises include all the features of the Superior Line and in addition are equipped with Self-adjusting Back Jaws, which can be adjusted for holding irregular work.



Swivel Base and Swivel Jaw

Parkco Metal, Solid Steel Bar, Reinforced Slide, Set Screw and Spring Tension on Lever, Positive Locking Device, Renewable Tempered Tool Steel Faces.

Nos	270	271	2711/2	272
Width Jaws, Inches	3	3 1/2	4	4 1/2
Jaws Open, Inches	3 1/2	5	5	6
Weight Each, Lbs	3.3	51	5.2	71
Each	\$17.50	20.00	24.00	28.00
Nos		273	274	275
Width Jaws, Inches		5	5 1/2	6
Jaws Open, Inches		7	9	9 1/2
Weight Each, Lbs		85	123	174
Each		\$35.00	44.00	60.00

## PARKER SERVICE STATION

vantage.

Designed and constructed as a special Vise for the Garage and Service Station. It includes an Anvil which is a great ad-

It is also well adapted for Shops or Industrial Plants.



Stationary Base

Parkco Metal, Solid Steel Bar, Reinforced Slide, Set Screw and Spring Tension on Lever, Renewable Tempered Steel Jaws

Bleef Jaws.		
Nos	134	135
Width Jaws, Inches	4	5
Jaws Open, Inches	5 1/2	6
Weight Each, Lbs		102
Each	\$17.50	24.00

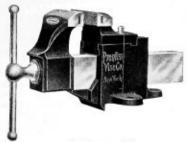


Swivel Base

Parkco Metal, Solid Steel Bar, Reinforced Slide, Set Screw and Spring Tension on Lever, Renewable Tempered Steel Jaws.

Nos	235
Width Jaws, Inches 4	5
Jaws Open, Inches 5 1/4	6
Weight Each, Lbs 80	104
Each 891 50	32.00

#### MACHINISTS VISES



#### PRENTISS

The Main Body of all Prentiss Vises are made from a mixture of gray iron and steel. All parts fit accurately and work smoothly. They are absolutely guaranteed against defects in workmanship or material.



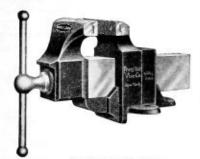
tionary.	

Self Adjusting Jaw	. Detach	able Steel	Faces	
Nos	1	2	236	- 3
Width Jaws, Inches	2.5%	3.34	4	4 1/6
Jaws Open, Inches	3 1/2	4 34	5 1/4	6
Weight Each, Lbs	13 1/2	2.8	41	5.4
Each	\$13.50	16.00	19.00	$22\cdot 00$
Nos		4	5	6
Width Jaws, Inches		5 14	6	7
Jaws Open, Inches	ereces exercises	8	9	10
Weight Each, Lbs		96	146	184
Each		\$35.00	50.00	65.00

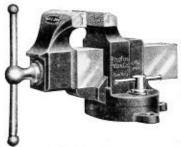
		180
Patent	Swivel	Burso.

Self Adjusting Jaw.	Detach	able Stee	4 Faces	
Nos	18	19	19 16	20
Width Jaws, Inches	2.5%	3.16	4	4 1/4
Jaws Open, Inches	3 %	4 3/4	5.1/4	6
Weight Each, Lbs	17	3.2	46	65
Each	\$16.00	20.00	24.00	28.00
Nos		21	22	23
Width Jaws, Inches		5 14	6	7
Jaws Open, Inches		8	9	11
Weight Each, Lbs		109	168	207
Each		\$44.00	60.00	75 00

#### BULL DOG



These Vises are designed to provide greatest available strength and maximum convenience to the user. Great care is taken to insure accurate fitting and interchangeability.



Stationary Bottom

Solid Jaw Parallel	, Detacha	ble Stee	1 Faces	
Nos	50	51	52	53
Width of Jaws, Inches	3 1/4	3 %	4 1/8	4 %
Jaws Open, Inches	4	5 1/2	6	7
Weight Each, Lbs	22	28	4.2	52
Each	\$10.00	11.25	12.75	15.50
Nos	54	55	56	57
Width of Jaws Inches	5	5 1/2	6	7
Jaws Open, Inches	8	9	10	12
Weight Each, Lbs	72	100	135	210
Each	\$20.00	30.00	39.00	55.00

Swittel Bottom

SWIN	ci portor	11		
Solid Jaw Parallel,	Detacha	ble Stee	l Faces	
Nos	90	91	92	93
Width of Jaws, Inches	3 14	3.5%	4 1/4	4 %
Jaws Open, Inches	4	5 1/2	6	7
Weight Each, Lbs	2.8	3.6	52	64
Each	\$13.00	15.00	17.00	20.00
Nos	94	95	96	97
Width of Jaws Inches	5	5 14	6	7
Jaws Open, Inches	8	9	10	12
Weight Each, Lbs	85	115	155	235
Each	\$30.00	38.00	52.00	70.00

#### PARKER'S SUPERIOR DOUBLE SWIVEL



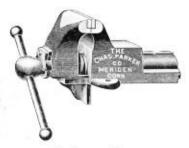
Swivel Base

Parkco Metal, Solid Steel Slide Bar, Reinforced Slide, Set Screw and Spring Tension on Lever, Renewable Tempered Tool Steel Faces.

Nos	429	439	449
Width Jaws, Inches	3 1/2	4	4 1/2
Jaws Open, Inches	3 1/2	6	7 3/2
Weight Each, Lbs	47	67	87
	27.00	32.00	39.00

In this Vise the Swivels work independently of each other allowing the work to be placed in any position without removing the work from the jaws.

#### PARKER'S OVAL SLIDE



Stationary Base

High Grade Steel Faced Jaws Top Ridge of Slide Fits into a Groove in Back Jaw Preventing Side Play when Slide is Extended.

to the same of the					
Nos	030	30	31	32	34
Width Jaws, In	2	2 1/2	3	3 1/2	4
Jaws Open. In	2 3/4	3	3 1/2	4	4.14
Weight Each, Lbs	7 1/2	8	13 1/2	19 1/2	29
Each	\$2.90	3.40	4.00	5.00	7.00

## VISES SHEPARD MECHANICS



#### Stationary or Swivel Bottom

These vises can be used either stationary or as a swivel bottom. Each vise is equipped with central bolt. Nut and washer for fastening to bench. Also provided with bolt holes for permanently securing to bench.

Nos,	 162	163
Width Jaws, Inches	 3 1/2	4
Opening, Inches	4	- 6
Weight Each, Lbs,	 1.6	39
Each	\$5.25	8.25

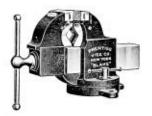
#### SHEPARD COMBINATION

#### For Garage or Home Use





#### BLAKE COMBINATION



#### Swivel Bottom

Patent Detachable and Interchangeable Steel Jaw Faces, Reversible High Grade Steel Pipe Jaws, all Bright Parts Highly Polished.

These Combination Pipe Vises are exceptionally heavy and made to stand heavy use.

Nos	180	180 36	181
Width Jaws, In	2 1/2	3	3 1/2
Holds Pipe, In	1/8 to 1	1/4 to 1 1/2	1/4 to 2 1/2
Wt. Each, Lbs	15	22	5.5
Each ,	\$10.00	12.00	16.00
Nos	182	182 16	183
Width Jaws, In	4 1/2	5	6
Holds Pipe, In	1/8 to 3	1/8 to 4	1/4 to 6
Wt. Each, Lbs	80	120	180
Each	\$22.00	32.00	45.00

The No. 183 Vise is made with wrought steel sliding bar. An extra nut for tightening swivel base is placed on left hand side of body.

#### PARKER SUPERIOR COMBINATION

#### Parkeo Metal, Swivel Base

Superior in Strength, Quality and Finish, Patent Swivel Base with Locking Attachment gives additional strength. Extra Strong Clean Cut Threads and Nuts, Saddle and Saddle Screw. Front Jaw is reversible so that it may be turned giving it double wear



double wear.				
Nos	87	88	288 16	289 16
Width Jaws, Inches	3 3/2	4 1/2	5	6
Jaws Open, Inches	3	5	6	9 1/2
Holds Pipe, Inches	1/8 to 2	1/s to 3	1/8 to 4	1/8 to 6
Weight Each, Lbs	4.7	71	118	185
Each	\$16.00	22.00	32.00	45.00

#### VISES

#### BULL DOG COACHMAKERS



#### Stationary Base Solid Jaw, Detachable Steel Faces

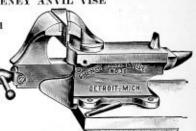
Designed with very high jaws and long arm, The deep throat and wide opening allow operator the maximum amount of room for holding work.

Furnished with smooth iaws.

#### CHENEY ANVIL VISE

Complete with Solid Steel Hardy or Cutting-off Tool

Iron Body, Chilled Hard and Smooth Anvil Face, Steel Faced Jaws, Wrought Iron Screw.



The adjustable jaw will turn so as to hold odd-shaped articles as shown in cut.

Nos	10 4 1/4 x 2	20 6 ½ x3	30 8x3 1/6	40 8 1/4 x 4
Jaws, Inches	2 1/2	3 1/2	4	4 1/2
Jaws Open, Inches	3	4	5	6
Weight Each, Lbs	9	25	35	5.0
Each	\$14.00	20.00	24.00	30.50



#### STANLEY BENCH

The screw (body, head and collar) is in one piece, turned from cold rolled steel and has a square lathe cut thread. The jaws are hardened and ground to insure their meeting square when closed. Both back and front jaws are filed to fit.

 Clamp Base, Blue Japanned, Plain Iron Jaws

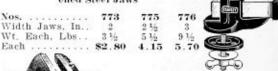
 Nos.
 741
 742
 743
 744
 745
 746

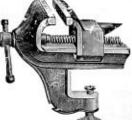
 Width Jaws, Inches.
 1 ½
 1 ¾
 2
 2 ¼
 2 ½
 3

 Weight Each
 Lbs
 3
 3 ¼
 3 ½
 4
 5
 8 ¼

 Each
 81.60
 1.90
 2.25
 2.70
 3.15
 4.95

Swivel Base, Brown Japanned, Hardened Steel Jaws





#### HARDY BENCH

Japanned Malleable Iron Body, Steel Screw

Nos	1 16	2	21/2
Wd. Jaws, In.	1 1/2	2	2 1/2
Jaws Open, In.	134	2 1/4	2 %
Wt. Ea., Lbs.	1	2	4
Each	\$0.50	1.00	1.50

A moderate priced vise for home and radio work.

#### BENCH DRILL VISES

YANKEE



For Use on Bench Drills or Separately Attached to Bench

Iron Body and Sliding Jaws. Removable Swivel Jaw for holding taper work, ½ in, diamster Steel Screw.

Fer Use on Bench Drills or Separately Attached to Bench for Holding Work to be Machined

Iron Body, Steel Jaws, Hardened Steel Block with V Shaped Grooves for holding irregular work, 5% in. diameter Steel Screw.



Nos	991	992	993
Base Length, Inches	3 5%	4 %	7.34
Base Width, Inches	1 1/2	2	2 34
Jaws Open, Inches	1 1/2	1 15	3 1/4
Depth of Jaws, Inches	7/8	1 14	1 7/8
Width of Jaws, Inches	1 1/2	2	2 3/4
Height Over All, Inches	1 ½	2 1/4	3
Length Over All, Inches	4 5%	6	8 34
Weight Each, Lbs	1 3/8	3 3%	9 1/8
Each	\$3.00	4.00	7.50



#### With Swivel Base

For use on Bench Drills or Separately Attached to Bench.
Iron Body and Sliding Jaws with Hardened Steel Faces,
complete with a Hardened Steel Block with V Shaped
Grooves of various sizes for holding irregular work in drilling, etc. The swivel base is locked or released by a short
movement of lever.

Nos	1991	1992	1993
Base Length, Inches	3 %	4 7%	7.1%
Base Width, Inches	1 1/2	2	2.34
Jaws Open, Inches	1 1/2	1 14	3 1/8
Depth of Jaws, Inches	7/8	1 1/4	1 %
Width of Jaws, Inches	1 1/2	2	2 %
Height Over All, Inches	3 1/8	4.3%	5 %
Length Over All, Inches		6	8 %
Weight Each, Lbs	2 3/8	5 70	133%
Each	\$4.00	6.00	10.00

## DRILL PRESS VISES



Gray Iron Jaws, Accurately Machined, Three Flanges on Base for attaching to Drill Press Table. A "V" shaped Slot in Jaws for vertical work.

Nes	2D
Width Jaws, Inches 3 1/2	5
Opens, Inches	5 1/2
Weight Each, Lbs	23
Each \$12.00	16.00

The surfaces upon which the movable jaw slides are carefully machined, thus providing uniform alignment.

The swivel arrangement of the handle insures easiness of operations in cramped positions.

#### BLACKSMITHS VISES



#### STANDARD HOLDFAST

Solid Box

Wrought Steel, Painted Black, Polished Jaws,

Nos	35	70
Width, Jaws, In.	4	5
Wt. Each, Lbs	3.5	7.0
Each	\$10.00	15.00

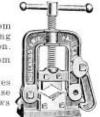
#### PIPE VISES

#### HOLLANDS MALLEABLE HINGED

Screw is One-piece Steel turned from Solid Bar and has Acme thread, giving maximum strength and rapidity of action.

Pipe Jaws are Tool Steel Milled from Solid Bars and Oil Tempered.

The Base is flat with all bracing flanges underneath, making it convenient to use a wrench in fastening with lag screws or bolts.



399	401
1/8 to 1 1/2	1/8 to 2
5	10
3.60	4.25
403	404
1/8 to 3 1/6	36 to 436
18	24
7.50	11.00
	1/8 to 1 ½ 5 3.60 403 1/8 to 3 ½ 18

#### CLAMP KIT Self-locking

Hardened and Tempered Tool Steel Jaws, Malleable Iron Hinge Frame with Clamp.

This Vice is for the worker's kit to take on the job. Quickly clamped to any convenient post or plank.

Heavy enough for average work and light enough to carry with o her tools.

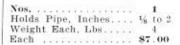
No	
Clamp Opens, Inches	2
Weight Each, Lbs	8
Each	84.50

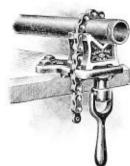
#### VULCAN CHAIN

Made entirely of Wrought Steel. The Drop Forged Jaws are of Saw-Tempered Steel for File Sharpening. Hand-made Flat Link Steel Chain.

These Vises are unbreakable, compact, rapid in action and positive in gripping pipe. They are serviceable upon and suitable for fastening to bench or post.

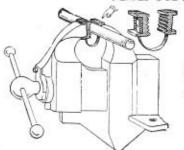
Adjustment is quickly effected by slightly turning the screw, and further quick adjustment is gained by engaging the projecting rivets of each chain with a series of bosses on base.





		•
2	3	4
% to 4	34 to 6	34 to 8
10	18	30
15.00	27.00	36.00

#### VISE JAWS



#### ELGIN

#### Fits Any Vise

Hardened Steel Jaws. Tempered Steel Spring, Self-Adjusting.

Each No. E-1-Holds Round Stock 1/4 to 3/4 in., Weight Each 10 Oz. 

Six in a Box.

#### HAND VISES

#### MILLERS FALLS With Detachable Handle

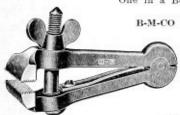
Forged and Tempered Steel Jaws, Steel Screw, Nickel Plated. Each

No. 1-6% in. Long, Jaws 1% in. Wide, Jaws Open 1 in., Detachable Hollow Hardwood Handle with Screw Cap, Containing Chisel. Screw Driver, Countersink, Square Reamer, Brad Awl, Scratch Awl and Washer Cutter, Weight Each 17 Oz. .....\$5.10



Furnished with a bit shank to be screwed into the tool either in the position of the handle, or at right angles, permitting the vise to be used in a bit brace. Handle may be screwed into the vise at right angles.

One in a Box.



#### No. 80—Cast Steel

Milled and Jaws Hardened, Carbon Finish, Face of Jaws Polished.

Length, Inches 4 1/4	5 1/2	6
Width Jaw, Inches 1 1/8	1 1/2	1%
Jaws Open, Inches 1/2	34	7/8
Weight Each, Oz 10	18	24
Each \$1.00	1.25	1.50
One in a Box.		

B-M-CO



Each No. 50-Hardened Steel Jaws, Carbon Finish, Holds in. and Smaller, with Octagon Metal Handle which Can be Clamped in a Vise, Weight Each 8 Oz. . . . . . . . . . . One in a Box.

#### STARRETT

#### With Angular Adjustable Handle

Case Hardened Tool Steel, Stained Hardwood Handle.

No. 200-71/2 in. Long, 1 in. Opening, Depth of Jaws 

The handle can be clamped at different angles for use around speed lathes, drill presses, etc. The stationary jaw has three V grooves for clamping round work.

One in a Box.

#### PIN VISES STARRETT



-	
Hollow	Handle

	Best Tool Steel, kel Plated	Prop	erly	Tem	pered,	Kr	ıu	rl	eđ			ndles, Each
No.	162A-Capacity	. 0	to	.040	in					, .		
No.	162B-Capacity	.030	to	.062	in							. 65
No.	162C-Capacity	.050	to	.125	in							. 65
No.	162D-Capacity	.115	to	.187	in							. 80
											Pe	er Set

No. S162-Set Complete, 1 Each Nos. 162A, 162B, 162C and 162D.....\$2.75 Six in a Box.

#### WOODWORKERS VISES R-W QUICK ACTING



#### Screw 1 in. Diameter, 4 Threads to the Inch

These vises are equipped with a two-piece cam-operated nut. This nut is simple and abso. lutely reliable in operation and will not get out of order, as there are no

small parts to wear out. The nut is phosphor bronze, the nut sleeve is made of grey iron. Cold rolled steel guides, best grey iron jaws.

No. 430-1-Jaws 7 in. Wide and 4 in. Deep, Open 10 in., Weight Each 32 Lbs...... ..... \$ 9.00 No. 430-2-Jaws 10 in. Wide and 5 in, Deep, Open 12 in., Weight Each 42 Lbs...... 10.80

#### LIGHTNING GRIP QUICK-ACTING

## Simple, Quick-Acting and Durable

The operation this vise is very sim-When the handle is in an upright position the cam (H) allows the dog (L) to



disengage the rack (E). This allows the front jaw to be moved freely and adjusted to the work. By moving the handle a quarter turn to the right, the cam forces the dog to engage in the rack and lock securely.

No. 17-Width of Jaws 9 in., Opens 12 in., Weight .\$12.00

Each 29 Lbs..... 10.00

#### CHRISTIANSEN STEEL SCREW



#### Jaw Fitted with Wood Facing

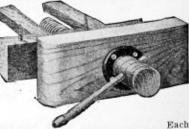
This vise is fastened on under the bench top with 4 screws and is ready for use. Each

No. 0-Width of Jaws 10 

#### CHRISTIANSEN WOOD SCREW



Complete ready to be attached to bench.



No. 1W-Jaw 12x4 % x2 1/4 in., Guide 12x2 % x1 % in., Slides 17 1/2 x1 1/4 in., Screw 21x2 in., Weight 

#### WORK BENCHES

#### MANUAL TRAINING



Hard White Northern Maple Finished in Shellac

Fitted with two Christiansen Steel Screw Vises, two Wood Stops, Tool Recess 8 ½ in. Wide, Size of Vise 10 in. Wide, Opens 9 in. The Screw is Cut from Cold Rolled Steel with the Continuous Double Thread Traveling in the Solid Nut. Legs 3x2 in., Strongly Mortised Joints.

This is a favorite pattern for use where neither cupboard nor drawer space is required, it stands perfectly rigid. Holes mortised for stops along the front.

#### MANUAL TRAINING



Hard White Northern Maple Finished in Shellac

Substantial construction and beautiful finish.

Three private drawers with locks and large cupboard.

Holes for wood stops are mortised conveniently near the front and two spring stops are regularly furnished with each bench. Saw Cut Threaded Screw Vises.

Equipped with two Christiansen Wood Screw Vises, 12 in, Jaws.

Working Top 13 ½ in. Wide, Tool Recess 8 ½ in. Wide, Private Drawers 18x16x5 in., Cupboard 18½x18¼x10 in.

Each of the drawers in the cabinet of this bench is fitted with brass cylinder locks having two keys. They are also equipped with brass drawer pulls.

#### CABINET MAKERS



Hard White Northern Maple

#### Finished in Shellac

Thoroughly Seasoned, Heavily Glued and Well Finished Working Top, equipped with two Saw Cut Threaded Wood Bench Screws 2 1/2 in. Diameter,

Height 34 in., Maple Top 16 in. Wide, Tool Recess 8 in. Wide, Legs 2x3 in.

Each

These Benches are built especially substantial for cabinet makers, pattern makers and carpenters use.

#### HALLOWELL HOME WORK



For the Garage, Basement and Boys' Radio Room

The Hallowell is a complete work bench shipped knocked down, easily assembled. Every board comes to you with all necessary holes drilled in it ready to be fastened to the steel legs. The steel drawer is equipped with a tray for small tools and slides on ledges inside of drawer. A machinists or woodworkers vise can be easily attached to the bench.

Each

#### BENCH SCREWS

PEXTO IRON



#### Wrought Iron Screw

Double Thread, Movable Collar, Second Growth Hickory Handle, Removable Knobs.

Nos	40A	40B	40C	40D
Diameter of Screw, Inches.		1 1/8	1 14	$1\frac{1}{2}$
Length Over All, Inches.	16	16	17	19 1/2
Length Under Collar, In.	13	13	14	16
Weight Per Dozen, Lbs	6.5	8.0	9.0	140
Per Dozen	\$13.20	16.00	19.20	30.00

Nos. 40A to 40C, One Dozen; No. 40D, One-half Dozen in a Case.

#### WOOD



#### Saw Cut from Hard White Maple

Wood Handle  $13 \frac{1}{2}$  in. Long, 1 in. Diameter with Threaded Knob on One End.

Nos	19
Length, Inches	24
Diameter, Inches	2 1/2
Weight Each, Lbs	
Each	83.00
Open Stock.	

#### BENCH BRACKETS

#### STANLEY



When the Jaw or Nose is put through a hole in the Bench Front it is automatically held in place, and by means of the Screw Clamp, the board being worked upon is firmly secured.

#### PINCH DOGS

JOHNSON



#### For Pattern and Cabinet Makers

Cuts Half Size. Forged from Bar Steel. Corners Over the Legs are Square, Making Easy Driving.

Nos	00	0	1	2	3
Size of Steel, Sq. Inches	125	1/4	3/4	1/4	10
Length, Inches	3/4	1	1 1/4	2	2 34
Weight Per Dozen, Lbs.	1/4	10	3/8	700	1 1
Per Dozen	\$2.00	1.50	1.50	2.00	2.50

#### BENCH STOPS



#### MORRILL Adjustable

The working plate and spindle are held in any position by a cam lever operated by a screw and nut. These are an ordinary stove bolt and only need onehalf turn to operate the cam lever.

No. 1—3 ½x2 in. Face, Made of Semi and Wrought Steel, Polished Face, with One Set of Teeth, Weight Per Dozen 12 Lbs......\$24.00 One-half Dozen in a Box.

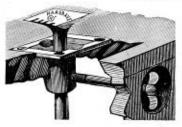
#### MILLERS FALLS

#### With Four Faces

Steel Hook, Nickel Plated, Inner Surface of Socket Enameled Red, Edge of Socket Polished, Adjustable to any desired position and height by means of a Set Screw in Center. One Side of Face has Coarse Teeth, One Side Fine. One Side has V Notch and the Other Face is Plain.



#### HARGRAVE



#### Adjustable to Any Angle

Japanned Body, Polished Face.

The Shank is adjustable to any angle or can be taken out to clear the shavings. The shank is held by means of a thumb screw countersunk in front of bench.

Per Dozen

#### SCREW BOXES



#### For Cutting Screws on Wood Dowels, Etc.

The Illustration Shows Style of Top Furnished with Each Box.

Nos	10A 38	10B ½	10C %	10D ¾
Each	\$			1111
Nos	10E 38	10F	10G 1 ¼	10H 1½
Each	8			

Prices on Application.

One in a Package.

#### TOOLMAKERS CLAMPS

STARRETT PARALLEL



For Holding Small Work Together, in Tapping, Drilling, etc.

These Clamps are made of Steel, Case Hardened, and are very useful for Holding Small Work together, in Tapping, Drilling, etc.

...... 161AA 161A 161B 161C 161D 
 Opening of Jaw, Inches
 34
 1 14
 1 34
 2 14

 Length of Jaw, Inches
 1 15
 2
 2 12
 3

 Per Pair (2 Clamps)...
 \$1.40
 1.70
 2.00
 2.40
 2 % One Pair in a Box.

#### BROWN & SHARPE



No. 754-With Spring Attachment

Steel Case Hardened with Spring Attachment for Holding the Loose Jaw Tightly and Preventing its Dropping or Sliding while Opening or Closing the Clamp.

Opening of Jaws, In	96	1	1 1/2	2	236
Length of Jaws, In	1 1/2	2 1/8	2 3/4	3 3/8	4
Weight Each, Lbs	The .	1/4	70	11	1
Each	\$0.70	.85	1.00	1.20	1.30

These Clamps are designed and proportioned throughout to insure the greatest strength and rigidity.

One in a Box.

#### STARRETT BLOCK



#### Drop Forged Steel, Case Hardened

These Clamps have take-up blocks to slip on and off end

of screw. Will hold work square and

parallel for laying out on surface plates, fitting or drilling. Has hole in block to insert screw, so that block may be fastened to bench, and used as a small vice.

		Inches	9 .				04.04	٠.		2	3
Opening,											3
Per Pair	(2 Cl	amps)			0					\$2.50	3.00

#### DRILL BLOCKS AND CLAMPS

#### STARRETT





The Clamp will hold a round piece up to 1 % in. diameter firmly in the groove of the blocks, for prick punching, drilling or laying out a series of holes before and while being drilled.

C. 12	No. 268A-Two Drill Blocks, Size of	
,	Each 2x1 ½ in	
	3—Clamp Only	
No. 268	-Set, Complete	

#### DRILL BLOCKS AND CLAMPS

BROWN & SHARPE



#### Hardened Tool Steel

For laying out work in connection with surface plate, angle iron or knee. Sides of blocks ground parallel. Blocks are approximately 1 ¼ x1 ¼ x1 % in. and take work 1 in, diameter.

No. 750-Set, 2 Blocks and One Set in a Box.

#### MACHINISTS C CLAMPS

Model AV

Drop Forged Steel, Heat Treated. Tool Steel Screw Hardened and Tempered, "Duro" Black Rust-proof Fin-

Nes	1	2	3
Opens, Inches	1 1/4	2 14	3 1/4
Depth, Inches	1	111	2 3/6
Wt. Each, Lbs		2	5 1/4
Each	81.50	3.50	5.00
Nos	and a section	4	5
Opens, Inches		4 1/6	6.36
Depth, Inches		213	3 1/4
Wt. Each, Lbs		7 1/2	11 1/2
Each		\$6.50	8.00



#### LATHE DOGS DROP FORGED STEEL

Model CK Safety Screw

Drop Forged Steel, "Duro" Black Rustproof Finish.

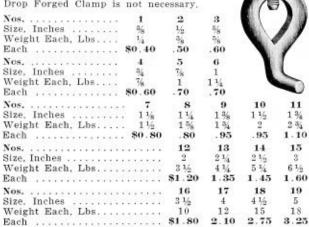
Nos	36	2B 1/2	3B ¾
Weight Each, Oz		5	9
Each		1.10	1.20
Wrench, Extra, Ea.	.12	. 14	. 16
Nos	4B	5B	6B
Size, Inches	1	1 1/4	1 16
Weight Each, Oz		26	3.2
Each	81.40	1.70	2.00
Wrench, Extra. Ea.		.20	.24

#### MALLEABLE IRON

Bent Tail

With U. S. Standard Steel Set Screw, Points Hardened.

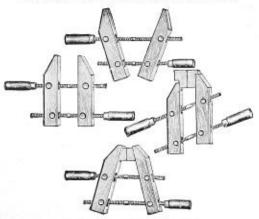
These Dogs are recommended for heavy work and have a number of uses when a Drop Forged Clamp is not necessary,





#### HAND SCREWS

JORGENSEN PEERLESS ADJUSTABLE



#### Adjustable to Any Angle

Hard Maple Jaws, Oil Finish, Spindles and Sockets Made of Steel, Right and Left Thread.

Nos	5/0	4/0	3/0	2/0	0	1
Jaws Open, In	2	2 1/2	3	3 1/2		6
Length Jaws, In	4	5	6	7	8	10
Wt. Dozen, Lbs	5	6	11	12	23	3.0
Per Dozen	\$15.00	16.20	18.00	19.20	21.00	24.00
Nos		3	4	5	6	7
Jaws Open, In	0.14	4.0	1.0	14	4 4	17
Length Jaws, In						
	12			18		24

Nearly twice as fast as any other hand screw made, its spindles being equipped with a right and left hand thread, Its jaws can be adjusted to any angle, thus doing away with the necessity of squaring up irregular surfaces, which every other clamp requires.

#### REGULAR

Best Quality Seasoned Hickory Screws, Hard Maple Jaws, Oil Finish



#### HANDY CLAMPS



Stamped Steel, Nickel Plated

With oil tempered Snaps on in an instant and holds with a solid grip. Will hold all kinds of ma-terial for glueing or for other class of work. Takes the place of hand screws.

Nos	1	2	3
Length, Inches	4	6	9
Jaws Open, Inches	1	1 3/2	2 34
Weight Each, Oz	3	4	12
Per Dozen	\$2.00	3.00	4.50

#### CARRIAGE MAKERS CLAMPS



With Ball and Socket Tips

Malleable Iron Frame, Steel Screw. The Best Clamp on the Market. Plain Finish, Heavily Reinforced Back, Steel Screw with Deep Cut Acme Threads, Steel Wings. Nos. . . . . . . . . . . . . 536 537 538 540 Opens, Inches ...... 2 1/2 3 4 5 6 Clearance, Inches..... 1 7/8 2 14 2 1/2 2 34 1 % 7/8 1 1/4 2 1/4 Weight Each, Lbs..... 🔏 1 % Per Dozen ...... \$7.00 8.00 11.00 14.00 18.00 Nos. .... 541 542 544 545 Opens, Inches ..... 10 12 Clearance, Inches ..... 3 14 3 % 3 % Weight Each, Lbs..... 3 % 5 % Per Dozen ...... .. \$22.00 28.00 36.00 46.00 Nos. 536 to 540, One-half Dozen in a Box; Nos. 541 to 545, Open Stock.

SNOW QUICK ACTING

Instantly Adjustable

Malleable Iron Clamp, Best Norway Iron Screw. By pressing lever, screw can be moved backward or forward without turning.

NOS	83	84	85	86
Opens, Inches	3	4	5	6
Weight Each, Lbs	1	1 1/2	2	2 1/2
Per Dozen	\$12.00	13.50	15.00	21.00
One	n Stock			

#### BODY CLAMPS HARGRAVE

With Button Tips

Malleable Iron Frame, Steel Screw.

Deeper and stronger than the Standard Carriage Clamp. Steel Screw.

Shaped Grip.		and altalitation of the same				
Nos	604	606	608	610		
Opens, Inches	4	6	8	10		
Clearance, Inches	2 1/2	3 %	3 %	4		
Weight Each, Lbs	1 3%	3 1/4	4 76	6 3%		
Per Dozen	\$14.00	22.00	34.00	42.00		
Op	en Stock					

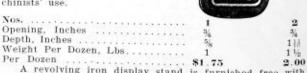
#### QUILT FRAME CLAMPS



Swivel Head Screw Cast Iron, Japanned, Cast Screw. Nos. ..... 32 23 Open, Inches.... 1 % 2 % Weight Each, Oz. 4
Per Hundred... \$15.75
No. 32, Twenty-five; No. 33, Ten in a Box. 6 1/2 17.75

#### DRAUGHTMENS CLAMPS

Japanned Iron, Polished Steel Screw Intended for draughtsmen and machinists' use.



A revolving iron display stand is furnished free with an order for one dozen of each size clamps.

#### CARPENTERS CLAMPS

HARGRAVE IMPROVED STEEL "I" BAR



#### With Side Notches and Adjusting Dog

High Carbon "I" Shape Steel Bar, % in. Diameter Acme Thread Steel Screw, Malleable Iron Crank, Frame and Slide. The Slide has tempered dog for engaging notches. The notches do not weaken the bar as they are in the web instead of being cut through the flange at bottom of bar.

#### Steel "I" Bar 1 1/2 x 1/8 x 1/8 in.

Nos	12 14	641 2½ 13 7.80	642 3 15 ¼ 8.00	643 3 ½ 16 8.50
Nos	17%	$645$ $4\frac{1}{2}$ $18\frac{3}{4}$ $9.50$	$\begin{array}{c} 646 \\ 5 \\ \mathbf{19\%} \\ \mathbf{10.00} \end{array}$	$647 \\ 6 \\ 22\frac{1}{4} \\ 11.00$

#### STEARNS STEEL BAR



#### Efficient, Powerful and Convenient

The notches are cut on the lower edge of the bar affording greater holding power to the sliding jaw than if they were on the upper edge.

Special quality stiff steel T bar, malleable bar sliding paws, pawls and crank. Ebonized wood handle, steel screws with deep and powerful thread.

Regular, 3x1	1/2 in.	Bar, 9	is in	. Screws
--------------	---------	--------	-------	----------

Nos	101 1½	102 2	104
Weight Pair, Lbs	13 88.75	9.00	9.50
Nos	105	106 5	107 6
Weight Pair, Lbs Per Pair	\$10.50	20 12.00	$\frac{23}{13.50}$

#### Extra Heavy 14 x1 34 in. Bar, 34 in. Screws

Nos	 154	155
Opens, Feet	7	8
Weight Pair, Lbs	 37	40
Per Pair	 \$24.00	26.00

## CABINETMAKERS CLAMPS

STEARNS ECCENTRIC, QUICK-ACTING

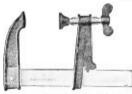


Style A

Best Quality Re Eccentric Lever.	efined	Maileable	e fron,	Swiver	neau.
Nos	2 1/4	1A 4 12 9.60	2A 6 20 13,20	3A 8 25 16.80	4A 12 30 20 · 40

#### QUICK CLAMPS

#### HARGRAVE



#### Movable Frame, Stationary Foot

The best Clamp for general purposes. Can be instantly applied or removed from the work.

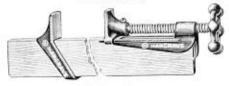
High Carbon Manganese Steel Bar, Malleable Iron Frame and Foot.

Steel Bar 134x36 in. Frame 436 in. Deep

Nos		502A	502B
Length Inches		. 12	1.8
	Lbs		3 16
Per Dozen		. \$34.00	40.00

#### CLAMP FIXTURES

#### HARGRAVE



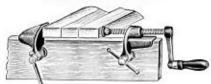
#### Without Bar

Malleable Iron, Steel Screw. Quickly and easily attached to any length Wooden Bar. Per Set No. 615—Will Fit 2¼x1½ in. Bar, Weight Per Set 2½ Lbs. \$1.25

Mounted on Hardwood Bars

Nos	616	617	618	619	620	621
Opening, Ft	1	2	3	4	5	6
Per Dozen	\$21.60	24.00	27.00	30.00	33.00	36.00

#### STEARNS UNIVERSAL



#### Fixtures Only

The Jaws and Crank are made of Malleable Iron, all the Screws are made of Steel with a deep powerful thread. Fitted with Malleable Ball and Socket Washers, which adapt themselves to any uneven surfaces.

Per Pair

No. 32—A Pair Consists of Two Sections Only, the Head Piece and the Sliding Jaw, to be Used on Any Piece of Timber up to 1½ in. Thick and 2 in. or Over Wide, Wt. Per Dozen Pairs 64 Lbs. \$3.00



#### FLOORING CLAMPS

STEARNS

Malleable Iron

A useful and Labor Saving Device for Laying Flooring.

#### SAW CLAMPS

GUNN FOLDING



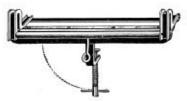
High Grade Malleable Iron, Black Japanned Finish, Cord Lined Jaws make Filing Practically Noiseless.

No. 16—16 in. Long, Weight Each 3 Lbs.......\$2.25

The length of the jaws permit filing full size hand or rip saw with but one change. This Clamp takes up no more space than an ordinary carpenters hammer.

One in a Box.

#### NEVERBREAK, ALL STEEL



#### Heavily Japanned Frame, Nickel Plated Parts

These Vises are Made from Angle, Channel and Bar Steel, Electric Spot Welded Together, Easily Adjusted Clamp, Patented Eccentric Locking Roll, Roll Grips the Saw Evenly Full Length of Jaw.

Per Dozen

No. 57-9 1/2 in. Jaws, Weight Per Dozen 18 Lbs. . \$12.59

#### With Rubber Cushioned Jaws

Per Dozen

No. 67—10 in. Jaws, Weight Per Dozen 21 Lbs. . \$15.00 One-twelfth Dozen in a Box.

#### STANDARD



Gray Iron Japanned, Plain Faced Jaws

Riveted Outer Jaw, with Cam Lever Tightener, to be Screwed to Bench.

Open Stock.

#### Adjustable Upright Pattern

Gray Iron, Japanned, Riveted Outer Jaw with Cam Lever Tightener, to be Clamped to Bench.

Per Dozen

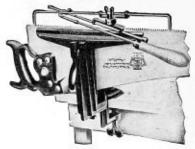
No. 3—9½ in. Plain Faced Jaws, Height Above Bench 9½ in., Length Over All 14½ in., Clamp Opens 1¾ in., Weight Per Dozen 48 Lbs. . . . . . \$13.00

Open Stock.



#### SAW FILING VISE AND GUIDE

DISSTON



#### With Clamp, File and Handle

Japanned Malleable Iron Clamp, Malleable Iron File Attachment and Slide, Polished Steel Wire Guide, Complete with File and Handle.

Especially designed to assist those not skilled in the art of saw filing to file a saw correctly.

The cut shows a saw and the guide in proper position for filing. There are three marks on the upper hub of the swivel attachment. One of the three marks shows when it is in position for one side and the other designates when it is in position for filing the other side. The third or center mark shows when it is in position for filing Rip saws.

One in a Box.

#### SAW FILING GUIDE AND CLAMP

DISSTON



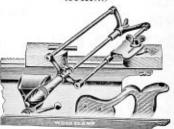
Complete with File

Japanned Iron, Steel Saw Guide, Eccentric Lever Opens and Closes Jaw. File Holder Works on Swivel and can be Adjusted to Any Position.

This tool is compactly built, requires but little room in tool box, is light in weight and durable.

One in a Box.

#### ATKINS



#### Used with Wood Clamp in Any Vise

With this tool every tooth is kept the same pitch and bevel, it being impossible to change its position without readjusting the filer. By means of a pointer and index the same angle and bevel is obtained on both sides of the saw. This filer can be used with wood clamp in any ordinary vise or with iron saw clamp.

One in a Box.

#### SAW SETS MORRILL SPECIAL



Indicating Anvil, Lock Nut Adjustment

The Anvil gives at one adjustment both the correct angle and depth of set.

No. 95-6 1/8 in. Long, Semi and Tool Steel, Polished, for Hand Saws and Band Saws Not Over 16 Gauge, Weight Per Dozen 8 Lbs......\$22.50 One-half Dozen in a Box.

#### MORRILL PERFECT



With Sliding Anvil

For Hand, Band, Jig, Butcher and Fret Saws, 1/2 in. and Wider, Not Over 16 Gauge Thick.

Same Frame, Handle and Parts as the Morrill "Special" except that it has sliding anvil and is for the experienced person who knows how a saw should be set and desires more latitude of set than is given with the "Special"

Per Dozen No. 1-6 1/8 in. Long, Weight Per Dozen 7 1/2 Lbs...\$22.50

One-half Dozen in a Box.

#### MORRILL PATTERN



With Sliding Adjustment

Malleable Iron, Polished, for Hand, Band and Jig Saws. This Set is offered as a good tool for a moderate price and answers the purpose for a Saw Set for ordinary use. Per Dozen

No. 3155-7 in. Long, Weight Per Dozen 8 Lbs....\$12.00 One-half Dozen in a Box.

#### STANLEY "PISTOL GRIP" ADJUSTABLE



For Hand Saws

Tool Steel Plunger and Anvil, Hardened and Tempered, Carefully Machined Parts, Black Finish. No. 42—Weight Each 1 Lb......\$2.40

The shape of this set permits a natural position and the saw is held in firmly against the gauge while tooth is being set, teeth are always in plain view. Anvil is graduated so that any adjustment can be readily duplicated.

One in a Box.

#### SAW SETS STEARNS PISTOL GRIP



#### With Oscillating Plunger

Hardened Anvil and Plunger, Finely Tempered Steel Springs.

Simple to operate as there are only three adjustments-(A) and (C) slots are used for setting Rip Saws. (B) slot is used for Cross Cut Saws. When setting Saw the Plunger comes in contact with Tooth at proper angle and does not interfere with any other. Teeth are set on both sides alike.

Per Dozen No. 695-Nickel Plated, Weight Per Dozen 12 Lbs. . \$30.00 One in a Box.

#### TAINTOR POSITIVE



All Steel, Nickel Plated

Anvil has 10 Different Pitches, for Hand and Other Fine Tooth Saws.

Per Dozen

No. 7—6 in. Long, Weight Per Dozen 7 Lbs......\$17.00

Consists of frame to which are attached two movable handles, an anvil and punch. Twenty adjustments are obtainable. Faces of anvil are numbered and will produce any setting ordinarily required.

One-half Dozen in a Box.

#### DISSTON MONARCH



#### Tool Steel Parts, Barff Finish, Polished Head

No. 2-6 in, Long, Steel Frame, Hardened Steel, Anvil and Plunger, Flat Steel Spring, for Hand, and All Small Saws, Weight Per Dozen 8 Lbs. . \$16.50 One-twelfth Dozen in a Box.

#### DISSTON TRIUMPH



#### Tool Steel Parts, Barff Finish, Polished Head

Per Dozen

28-71/2 in. Long, for Hand, Back, Web and Narrow Band Saws, 10 Points to the Inch and Coarser, Weight Per Dozen 9 1/2 Lbs......\$22.50 One-twelfth Dozen in a Box.

#### SAW SETS

#### AIKEN PATTERN



#### To be Set in Vise or Hole of Bench

Forged Steel Anvil and Hammer, Polished, with Set Screw for Gauging Angle of Set.

Per Dozen

No. 1A-Weight Per Dozen 6 Lbs..... One-half Dozen in a Box.

#### MORRILL



Semi-Steel Handles, Tool Steel Anvil and Plunger, Cast Finish, with Sliding Adjustable Anvil.

No. 3-9% in. Long, Pointed Plunger for Single Tooth Cross Cut Saws 14 to 20 Gauge, Weight ..\$33.00

M and Other Double Tooth Saws, Weight Per 

One-half Dozen in a Box.



#### For Cross Cut and Mill Saws

Semi-Steel Handles, Tool Steel Anvil and Plunger with Sliding Adjustable Anvil for Board Saws 6 to 14 Gauge. Per Dozen

No. 5-15 in. Long, Natural Finish, Weight Per Dozen 36 Lbs.....\$48.00 One-half Dozen in a Box,

## SAW JOINTERS

#### PERFECT



#### For Hand Saws

Wrought Steel, Black Japanned, Complete with File, Joints the Teeth Absolutely True.

Perfect-Adjustable to Any Thickness Up to % in., 

A substantial and efficient device which joints Saws of any thickness perfectly true and also gives excellent satisfaction as a skate sharpener.

One in a Box.

#### CROSS CUT SAW TOOLS

#### DISSTON UNIVERSAL



Raker Tooth Gauge.





Set Gauge.

Setting Block.

#### Jointer, Raker Tooth Gauge, Side File, Set Gauge and Setting Block Combined

Full Directions Accompany Each Set. Per Dozen Sets Universal—Weight Per Dozen Sets 15 Lbs......\$16.50 One Set in a Box.

#### SAW SWAGES

#### CONQUEROR



#### Natural Finished Forged Steel Body

Hardened Face, Polished Edges, Hardened Crucible Steel Jaws, Blued Steel Cap.

No. 1-5 in. Long, for Large Saws, Wt. Each 1 Lb. \$5.50 No. 2-3½ in. Long, for Small Circular and Mill Saws, Not Heavier than 10 Gauge, Weight Each

3/8 Lb. .... No. 3-2 % in. Long, for Small Circular Saws and Narrow Band Saws Not Heavier than 15 Gauge,

Weight Each 1/8 Lb..... No. 4—4 1/4 in. Long, for Band Saws, Weight Each 3.50 

One in a Box.

#### CONQUEROR, PROJECTING TONGUE



#### Natural Finished Forged Steel Body

Hardened Face, Polished Edges, Hardened Crucible Steel Jaws, Blued Steel Cap.

Each

No. 0-6 in. Long Over All, Projection 1/2 in., for Large Saws, Weight Each 1 1/2 Lbs..... 6.00

These Swages are similar to the Regular Conqueror Swages except the Tongue extends and resting on the face of the tooth, acts as a guide to obtain the proper angle for swaging. They are used where a spread set is desired.

One in a Box.

#### CROSS CUT SAWS

#### SIMONDS



#### No. 13-Champion Tooth

Crescent Ground, Two Cutting Teeth to One Raker Tooth, 14 Gauge at Center of Cutting Edge, 16 Gauge at Back on Ends, 19 Gauge at Center of Back Edge,

Length, Feet	5	5 32	6	6 36
Width at Center, Inches	6 3%	7	7 1/8	7.36
Weight Each, Lbs	5 1/4	6 1/4	7 3/2	8 1/2
Each, without Handles.	\$9.00	10.00	11.50	13.00



#### No. 22-Perforated Lance Tooth

Crescent Ground, 14 Gauge at Tooth Edge, 19 Gauge at Center of Back Edge.

Length, Feet	5	5 1/2	6	6 36
Width at Center, Inches	6.7%	7	7.1%	7 1/2
Weight Each, Lbs	5 14	6 1/4	7 1/2	8 1/2
Each, without Handles.	\$9.00	10.00	11.50	13.00



#### No. 200-Champion Tooth

Taper Ground, Two Cutting Teeth to One Raker Tooth, 5 Gauges thinner at Back than at Tooth Edge.

Length, Feet	5	5 36	6	6 36
Width at Center, Inches	5 %	5 34	5 7/8	6 1/4
Weight Each, Lbs	4 54	5	6 1/4	7 1/4
Each, without Handles.	\$6.60	7.20	7.80	8.60

#### SIMONDS FELLING



#### No. 113-Champion Tooth

Crescent Ground, Medium Wide Hollow Back, Two Cutting Teeth to One Raker Tooth, 14 Gauge at Tooth Edge, 19 Gauge at Center of Back Edge.

Length, Feet	5	5 1/2	6
Width at Center, Inches	5 34	5 1/2	5 34
Weight Each, Lbs	5	5 1/4	5 1/2
Each, without Handles	\$9.00	10.00	11.50



#### No. 325-Perforated Lance Tooth

Crescent Ground, Four Cutting Teeth to One Raker.

Length, Feet	4 36	5	5 14	6	6 36
Width at Center, Inches	5	5 %	5 34	5 %	6 14
Weight Each, Lbs	3 1/4	4 34	5	6 34	7 34
Each, without Handles.	87.75	8.60	9.60	11.20	13.00

#### SIMONDS NARROW FELLING



#### No. 315-Champion Tooth

Crucible Steel, Oil Tempered, Crescent Ground.

Length, Feet	4 1/2	5	5 1/2	6	636	
Width at Center, Inches		3 1/2	3 1/2	3 1/2	3 1/2	
Weight Each, Lbs	4	4 1/2	5	5 1/2	6	
Each, without Handles.	\$8.00	9.00	10.00	11.50	13.00	

#### CROSS CUT SAWS

#### DISSTON



#### No. 2—Champion Tooth

Crucible Steel, 2 Gauges thinner on Back than on Tooth Edge.

Length, Feet	4	4 36	5	5 36	6	6 32
Width at Center, In	6 1/2	6 %	7	7 1/4	7 1/2	7 34
Weight Each, Lbs	4	4 1/2	5 1/4	6 3/4	7 1/2	8 1/2
Each, without Handles	84.20	4.75	5.25	5.80	6.30	6.85



#### No. 2-Tenon Tooth

Crucible Steel, 2 Gauges thinner on Back than on Tooth Edge.

Length, Feet	4	4 36	5	5 16	6	6 32
Width at Center, In	6 1/4	6 1/2	6 %	7	7 14	7 1/2
Weight Each, Lbs	3 34	4 14	5	6	7	8
Each, without Handles	\$4.20	4.75	5.25	5.80	6.30	6.85



#### No. 2-Tuttle Tooth

Crucible Steel, 2 Gauges thinner on Back than on Tooth Edge.

and Dec						
Length, Feet	4	4 36	5	5 36	6	634
Width at Center, In	6 1/8	6 %	6 %	6 %	7 1/8	7 %
Weight Each, Lbs	3 34	4 1/4	5	6	7	8
Each, without Handles	84.20	4.75	5.25	5.80	6.30	6.85

#### BAY STATE NARROW



#### No. 210—Champion Tooth

Crucible Steel, Hollow Ground.

Length, Feet	4 3/2	5	5 1/2	6	6 12
Width at Center, In	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2
Weight Each, Lbs	4	4 1/2	5	5 1/2	6
Each, without Handles.	\$2.75	3.00	3.35	3.75	4.00



#### No. 231-Champion Tooth

Crucible Steel, Straight Ground

CIALIBIC DOCCUI	O 40 400 O 400 0		
Length, Feet	3	3 16	4
Weight Each, Lbs	3 1/2	4	5
Each, with Handles		3.80	4.40
Length, Feet	4 16	5	5 34
Weight Each, Lbs		6	6 1/2
Each, with Handles		5.40	6.00

#### DOCKING OR FRAMING SAWS



#### With Malleable Iron Handle

Crucible Steel, Full Breasted Blade, Bevel Filed Teeth,
Taper Ground Clearance.

Per Dozen

One-Third Dozen in a Box.

## HAND, RIP AND PANEL SAWS

#### DISSTON



#### No. 12-Straight Back

Extra Refined London Spring Steel, Patent Ground and Tempered, Highly Polished, Carved and Polished Applewood Handle, Brass Screws, 3 Screws in 18 to 22 in. and 4 Screws in 24 to 28 in. Saws.

Length, Inches Points to Inch Weight Per Dozen, Lbs Per Dozen	9, 10, 11 18	8, 9,	Panel 22 10, 11, 12 20 53.00
Length, Inches Points to Inch Weight Per Dozen, Lbs Per Dozen	8, 9, 10, 11,	12 7, S,	Hand 26 9, 10, 11 26 31.50
Length, Inches Points to Inch Weight Per Dozen, Lbs Per Dozen One-third Do	18 \$53.00	Rip 24 6 21 57.50	$\begin{array}{c} \textbf{Rip} \\ \textbf{26} \\ 5, 5 \frac{1}{2}, 6 \\ 26 \\ \textbf{61.50} \end{array}$



#### No. 128-Narrow, Straight Back

Ship Pattern, 6½ in. Wide at Butt, 1½ in. Wide at Point, Extra Refined London Spring Steel, Patent Ground and Tempered, Highly Polished, Carved and Polished Applewood Handle, Brass Screws.

	Panel	P	anel	I	anel
Length, Inches	20	The second second	22		24
Points to Inch 9	0, 10, 11	8, 9, 10	. 11, 12	8, 9, 1	10, 11, 12
Wt. Dozen, Lbs.	17		19		21
Per Dozen	\$48.50	53	.00	5	7.50
	Han	d	Rip	Rip	Rip
Length, Inches	26		22	24	26
Points to Inch "	7, 8, 9, 10	. 11, 12	6	6	5.5%.6
Wt. Dozen, Lbs.	23		19	21	23
Per Dozen	\$61.	50	53.00	57.50	61.50
Or	ne-third I	ozen ir	a Box.		



#### No. 16—Straight Back

Refined Crucible Steel, Patent Ground and Tempered, Full Polished, Carved and Polished Applewood Handle, 4 Brass Screws.

Length, Inches. 20	Panel 22	Panel 24	Hand 26
		Oracle Control of the Control	
Points to Inch., 9, 10, 11 Wt. Dozen, Lbs. 19	21	23	26
Per Dozen \$49.00	42.00	45.00	47.20
	Rip	Rip	Rip
Length, Inches	22	24	26
Points to Inch	6	6	5, 5 1/2, 6
Weight Dozen, Lbs	21	23	26
Per Dozen	842.00	45.00	47.20
One-third	Dozen in a	Box.	

DISSTON



#### No. D15-Straight Back

Extra Refined London Spring Steel, Patent Ground and Tempered, Highly Polished, Carved and Polished Rosewood Handle, Nickel Plated Screws.

Length, Inches	Hand 26
Points to Inch	8, 9, 10, 11
Per Dozen	\$80.00
One-third Dozen in a Box.	



#### No. D8—Skew Back

Refined Crucible Steel, Patent Ground and Tempered, Highly Polished, Applewood Handle, Full Polished, 5 Brass Screws.

	Hand	Rip
Length, Inches	26	26
Points to Inch	7, 8, 9, 10, 11	5, 5 1/2, 6
Weight Per Dozen, Lbs	26	26
Per Dozen	\$47.20	47.20

One-third Dozen in a Box.



#### No. D23-Straight Back, Ship Carpenters

614 in. Wide at Butt and 15% in. at Point. Suitable for Use where a Narrow Saw is Desired.

Refined Crucible Steel, Patent Ground and Tempered, Highly Polished, Applewood Handle Carved and Polished. 5 Brass Screws,

Hand	Rip
26	26
7, 8, 9, 10, 11	5, 5 1/2, 6
21 %	21 %
\$52.80	52.80
	$\begin{array}{c} 26 \\ 7, 8, 9, 10, 11 \\ 21 \% \end{array}$

One-third Dozen in a Box.



#### No. 7-Straight Back

Crucible Steel, Patent Ground and Tempered, Grained Blade, Beechwood Handle Polished, 4 Brass Screws, The Original Disston Saw.

	Panel	Panel	Paner
Length, Inches	18	20	22
Points to Inch	9,10	8, 9, 10	8, 9, 10
Weight Dozen, Lbs	18	21	23
Per Dozen	\$31.50	34.00	37.50
	Panel	Hand	Rip
Length, Inches	24	26	26
Points to Inch	8, 9, 10	7. 8. 9. 10	5, 5 1/2, 6
Weight Dozen, Lbs	25	27	27
Per Dozen	\$39.50	42.00	42.00
One thi	ad Present	D	

One-third Dozen in a Box.

#### HAND, RIP AND PANEL SAWS

#### SIMONDS BLUE RIBBON



No. 61-Straight Back

Simonds Special Crucible Steel, Patent Temper, High Gloss Finish, Highly Polished Carved Applewood Handle, Brass Screws.

Length, Inches	26
Points to Inch	5,51/2,6
Per Dozen \$60.00	60.00
One-third Dozen in a Box.	



No. 62-Skew Back

Simonds Special Crucible Steel, Patent Temper, High Gloss Finish, Highly Polished Carved Applewood Handle, Brass Screws.

	Hand	Rip
Length, Inches	26	26
Points to Inch	. 7, 8, 9, 10, 11	5.5%.6
Weight Dozen, Lbs	. 24	24
Per Dozen		60.00
One-third Doz	en in a Box	



No. 361-Narrow Straight Back

Ship Pattern 6 ¼ in. Wide at Butt, 1 ¾ in. Wide at Point, Simonds Special Crucible Steel, Patent Temper, High Gloss Finish, Highly Polished Carved Applewood Handle, Brass Screws

	Hand	Rip
Length, Inches	26	26
Points to Inch	7, 8, 9, 10, 11	5,51/2,6
Weight Dozen, Lbs	23	23
Per Dozen		60.00
One-third Dozen		



No. 362-Narrow Skew Back

Ship Pattern, 6¼ in. Wide at Butt, 1¾ in. Wide at Point, Simonds Special Crucible Steel, Patent Temper, High Gloss Finish, Highly Polished Carved Applewood Handle Brass Screws.

	Hand	Rip
Length, Inches	26	26
Points to Inch	7, 8, 9, 10, 11	5, 5 1/2, 6
Weight Dozen, Lbs		22
Per Dozen	\$60.00	60.00
One-third Dozen	in a Box.	

SIMONDS BLUE RIBBON



No. 71-Straight Back

Simonds Special Crucible Steel, Patent Temper Polished, Carved Applewood Handle with Carved Grip, Brass Screws.

Market (1900-1904) - 18 Market (1900-1900)	Hand	Rip
Length, Inches	26	26
Points to Inch	7, 8, 9, 10, 11	5,5%,6
Weight Dozen, Lbs		26
Per Dozen	845.00	45.00

One-third Dozen in a Box,

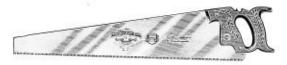


No. 72-Skew Back

Simonds Special Crucible Steel, Patent Temper Polished, Carved Applewood Handle with Carved Grip, Brass Screws.

	Hand	Rip
Length, Inches	. 26	26
Points to Inch	. 7, 8, 9, 10, 11	5, 5 1/2, 6
Weight Dozen, Lbs	. 25	25
Per Dozen	. \$45.00	45.00

One-third Dozen in a Box.



No. 371-Narrow Straight Back

Ship Pattern, 61/4 in. Wide at Butt, 13/4 in. Wide at Point, Simonds Crucible Steel, Patent Temper, Polished, Applewood Handle with Carved Grip, Brass Screw.

	Hand	Rip
Length, Inches	26	26
Points to Inch	8, 9, 10, 11	5. 5 1/2. 6
Weight Dozen, Lbs	23	23
Per Dozen	\$45.00	45.00
One-third Dozen	in a Box	



No. 372-Narrow Skew Back

Ship Pattern, 6¾ in, Wide at Butt, 1¾ in, Wide at Point, Simonds Special Crucible Steel, Patent Temper, Polished Applewood Handle with Carved Grip, Brass Screws.

Length, Inches	Hand	Rip 26
Points to Inch		5, 5 1/2, 6
Weight Dozen, Lbs		22
Per Dozen	\$45.00	45.00
One-third Dozen	in a Box.	

#### HAND, RIP AND PANEL SAWS

SIMONDS



No. 10-Straight Back, Medium Width

Special Crucible Steel, Patent Tempered, Full Taper Ground Blade, Polished Beechwood Handle, Brass Screws. 5 % in. Wide at Butt, 2 in. Wide at Point,

Length, Inches	Panel 22	Panel 24	Hand 26
Points to Inch	8, 9, 10, 11	8, 9, 10, 11	8, 9, 10, 11
Weight Dozen, Lbs	20	22	24
Per Dozen		38.00	40.00
	Rip	Rip	Rip
Length, Inches	22	24	26
Points to Inch	6	6	5, 5 1/2, 6
Weight Dozen, Lbs	20	22	24
Per Dozen	\$36.00	38.00	40.00

One-third Dozen in a Box.



No. 101/2-Skew Back

Special Crucible Steel, Patent Temper, Full Taper Ground Blade, Polished Beechwood Handle, Brass Screws.

Length, Inches Points to Inch Weight Dozen, Lbs		Panel 24 8, 9, 10, 11 23	Hand 26 8, 9, 10, 11 25
Per Dozen	\$38.00	40.00	42.00
Length, Inches Points to Inch Weight Dozen, Lbs Per Dozen	Rip 22 6 21 \$38.00	Rip 24 6 23 40.00	Rip 26 5, 5 ½, 6 25 42,00

These saws are in quality and finish of steel and handle the highest value for the moderate price, and will appeal especially to the amateur mechanic, the manual training student or the worker on the farm or at the home shop.

One-third Dozen in a Box.

#### SIMONDS HOME AND FARM



No. 44-Skew Back

Spring Tempered Steel Blade, Ground and Tempered, Nicely Polished, Carved Birch Handle, Four Screws.

	Hand
Length, Inches	24
Points to Inch	7,8
Weight Per Dozen, Lbs	22
Per Dozen	\$26.00

One-half Dozen in a Box.

#### HAND, RIP AND PANEL SAWS

NEW DISSTON



No. D18-Skew Back, with New Disstonite Handle

Highly Polished Refined Spring Steel, Unbreakable Waterproof Handle Fastened to Blade with 6 Brass Screws and Lock Washers. Hand Rip

Weight Each 2 1/2 Pounds.

The Disstonite Handle is stronger than any other ever used—practically unbreakable. It cannot warp, crack or check, and it is always tight on the blade. It is scientifically fitted to the hand and is not affected by water or oil. It has a beautiful permanent finish.

One in a Box.

#### VULCAN



#### No. 655—Narrow, Skew Back

Cast Steel, Patent Ground and Tempered, Full Polished, Varnished and Carved Applewood Handle, 4 Brass Screws, Blade 6½ in. Wide at Butt, 1½ in. at Point.

	Panel	Panel	Panel
Length, Inches	20	22	24
Points to Inch	8, 9, 10	8, 9, 10	8, 9, 10
Weight Per Dozen, Lbs.	16	18	20
Per Dozen	\$19.00	20.00	21.00
	Hand	Rip	Rip
Length, Inches	26	24	26
Points to Inch	7, 8, 9, 10	6	5, 5 1/2, 6
Weight Per Dozen, Lbs.	22	20	22
Per Dozen	\$22.00	21.00	22.00
One-half	Dozen in a	Box.	

# PONTIAC

No. 50-Straight Back

 Cast Steel, Varnished Edge Beech Handle, 3 Brass Screws.

 Panel
 Hand

 Length, Inches
 20
 26

 Points to Inch
 7, 8, 9
 7, 8, 9

 Weight Per Dozen, Lbs
 16 ½
 22

 Per Dozen
 \$13.00
 15.50

 One-half Dozen in a Box.

#### FLOORING SAWS



#### Adjustable

Polished Crucible Steel Blade, Carved and Polished Cherry Handle, Adjustable Handle, Wing Screw.

No. D19-18 in. Blade, Weight Each 1 Lb........\$46.20

Designed to cut out section of floor, partition or ceiling without boring holes, chiseling, etc.

One-third Dozen in a Box.

#### BACK SAWS



No. 4-Best Crucible Steel Blade

Blued Steel Back, Applewood Handle with Polished

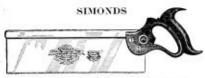
10 12	14	16	18
12 14	18	22	2.6
32.25 36.50	41.50	46.00	50.00
	12 14 332.25 36.50	000 000 000	12 14 18 22 32.25 36.50 41.50 46.00



No. 1—Cast Steel Blade

Blued Steel Back, Beechwood Handle with Polished Edges, Brass Screws.

Length, Inches	10	12	14	16	18
Wt. Dozen, Lbs	12	14	18	22	2.6
Per Dozen	\$23.00	27.50	32.25	36.50	41.50
Or	e-third	Dozen in	a Box.		



No. 97-Crucible Steel Blade

Blued Steel Blade, Beechwood Handle with Polished Edges, Brass Screws. 18 Length, Inches..... 16 12 Weight Dozen, Lbs... 12 14 18 22 26
Per Dozen ...... \$27.50 31.50 33.50 40.00 47.00 One-third Dozen in a Box.

#### MITRE BOX SAWS



No. 4M-Crucible Steel Blade

Blued Steel Back, Applewood Handle with Polished Edges, Three Brass Screws, 11 Points to the Inch.

Length, Inches . . . . . 20 5 4 4 Width Blade, Inches. . 4 Weight Dozen, Lbs... 32 ½ 34 ¾ 37 ¼ 41 47 Per Dozen ...... \$55.00 60.00 64.00 69.50 74.00 One-third Dozen in a Box.

#### BACK SAWS FOR METAL

DISSTON



No. 440-Fer Cutting Iron and Steel

Special Tempered Steel Blades, Heavy Steel Back, Applewood Handle, Brass Screws. 12 Points to the inch. Size Blade, Inches.... 20x4 22x4 24x4 24x5 22x4 24x4 24x5 28x5 34 36 40 46 Weight Dozen, Lbs. 29 34 36 40 46 Per Dozen, ... 35 200 68 00 72 00 82 00 94 00 One-third Dozen in a Box.

#### CABINET SAWS

DISSTON

No. 80-Nickel Plated Lever Tightener



Crucible Steel Blade, One Edge 10 Points for Cutting Grain, Other Edge 15 Points for Cross Cutting, & in. Hole in End for Hanging Up, Cherry Wood Handle, Blade 3 1/4 in. Wide.

Length, Inch	es		12
Weight Doze	n, Lbs		12
Per Dozen .			\$10.50
	One-third	Dozen in a Box.	

#### DOVETAIL SAWS

DISSTON



No. 68-Spring Steel Blade

17 Points to the Inch, Brass Plated Steel Back, Polished Wood Handle, 11/2 in, Wide Under Back. Length, Inches ..... 9 Weight Per Dozen, Lbs..... 20.00 Per Dozen .....

No. 69-For Metal Same as No. 68, except specially tempered, for cutting brass, copper and other soft metals. Length, Inches ..... 21.50 \$20.00 Per Dozen .... One-sixth Dozen in a Box.

#### PATTERNMAKERS SAWS

DISSTON



Designed for Fine Smooth Work Cast Steel Blade. 15 Points to the Inch, Plain Applewood Handle, Two Brass Screws. Per Dozen No. 1P-7½x1¼ in. Blade, Weight Per Dozen One in a Box.

## STAIR BUILDERS SAWS

DISSTON



Adjustable for Various Depths of Cut Beech Handle, Varnished Edges, Crucible Steel Blade. Per Dozen

No. 0-6x1 % in. Blade, 20 Gauge, 8 Points, Weight . . . . . . . . \$13.50 Each 12 Ozs. ... One-half Dozen in a Box.

METAL CUTTING SAWS

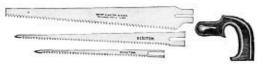


With Adjustable Handle

High Grade Steel Specially Tempered for Cutting Nails, etc., as well as Wood. No. 78-20 in. Blade, Weight Per Dozen 14 Lbs. \$40.00 One-third Dozen in a Box.

#### NESTS OF SAWS

#### DISSTON



#### With Interchangeable Blades

Per Dozen Nests No. 3 Nest-Consists of One 10 in Keyhole Blade, One 14 in. Compass Blade and One 16 in. Pruning Blade and Beechwood Handle with Nickel Plated Tightening Lever, Weight Per Dozen Nests 12 Lbs......\$28.00

		EXTE							I	•	er :	Doze:
10 in.	Keyhole	Blades	 								. \$	5.5
14 in.	Compass	Blades	 			 						6.0
16 in.	Pruning	Blades	 									12.0
		te										
		-quarter Do										

#### SIMONDS



#### With Interchangeable Blades

Per Dozen Nests No. 84 Nest-Consists of One 10 in. Keyhole Blade, One 14 in. Compass Blade, One 16 in. Pruning Blade and Beechwood Handle, with Tightening Lever, Weight Per Dozen Nests 10 Lbs..... \$28.00 One-quarter Dozen Nests in a Box.

			E	X'	П	R.	A	)	Ρ.	1	R	T	$\mathbf{s}$					F	e	r l	Dozen
10	in.	Keyhole	Blade																	. 8	5.50
14	in.	Compass	Blade															3			6.00
16	in.	Pruning	Blade													·		Ŷ.			12.00
Ha	ndle	. Comple	te																		4.00

#### JENNINGS



#### With Interchangeable Blades

Per Dozen Nests No. 014 Nest-Consists of One 12 in. Keyhole Blade, One 14 in. Compass Blade, One 14 in. Panel Blade and Beechwood Handle with Thumb Nut Tightener, Weight Per Dozen Nests 12 Lbs., \$15.00 One-half Dozen Nests in a Box.

#### DISSTON PLUMBERS



#### With Metal Cutting Blade

Per Dozen Nests No. 60 Nest-Consists of One 10 in. Keyhole Blade, One 14 in. Compass Blade, One 18 in. Metal Cutting Blade and Beechwood Handle with Nickel Plated Tightening Lever, Weight Per Dozen Nests 15 Lbs......\$32.00 One-quarter Dozen Nests in a Box.

		EXTRA PARTS	P	er l	Dozen
10	in.	Keyhole Blade		. 8	5.25
14	in.	Compass Blade			6.00
14	in.	Plumbers' Blade			7.50
16	in.	Pruning Blade			12 00
18	in,	Metal Cutting Blade			15.00
Ha	ndle	e, Complete			4.00

#### COMPASS SAWS

DISSTON INTERCHANGEABLE



No. 4—With Nickel Plated Tightening Lever Crucible Steel Blade, Applewood Handle.

Length Blade, Inches... 10 Weight Per Dozen, Lbs. 5 1/2 12 14 16 6 6 1/2 Per Dozen ...... 89.00 Extra Blades....Dozen, 5.25 9.50 10.00 10.50 5.50 6.00 6.50 Saws, One-quarter Dozen in a Box; Blades, One-half Dozen in a Box.



No. 2-Crucible Steel Blade, Applewood Handle, 2 Brass Screws

Length Blade,	Inches	. 10	12	14	16
Weight Dozen	Lbs	5	5 1/2	6	6 1/2
Per Dozen		\$9.50	9.75	10.25	10.50
	One-half	Dozen	in a Box.		



No. 94—Cast Steel Blade, Hardwood Handle, Steel Screws

Length Blade, Inches 12	14
Weight Per Dozen, Lbs 5 1/2	6
Per Dozen \$4.25	4.25
One-half Dozen in a Boy	



No. 87-Crucible Steel Blade, Applewood Handle, Two Brass Screws

Length Blade, Inches		14
Weight Per Dozen, Lbs		6
Per Dozen		10.50
One-half Dozen in	a Box.	





No. 116-Crucible Steel Blade, Carved Applewood Handle, Two Brass Screws

and antend for the	
Length Blade, Inches 12	14
Weight Per Dozen, Lbs 6	6 1/2
Per Dozen \$10.50	11.50
One-half Dozen in a Por	

#### KEYHOLE SAWS DISSTON



Beechwood Handle, Varnished Edges, Two Brass Screws,

Length Blade, Inches 12	14
Weight Per Dozen, Lbs 4 1/2	5
Per Dozen	6.50

#### KEYHOLE SAWS AND PADS



#### Japanned Iron Handle, Cast Steel Blade

Reversible Blade, Butt End of Blade forms a Screwdriver.

## HANDY SAW KITS







#### For Plumbers Use

High Grade Crucible Steel Blades. The Plumbers' Saw Blade is specially tempered for cutting nails, bolts, gas pipe, soil pipe, etc. Put up in a durable canvas bag having strong bound edges, and containing separate compartments for each blade with a special pocket for the handle. Convenient and light to carry.

Per Set

#### JENNINGS



#### A Handy Household Set

Steel Blades Hardened, Tempered and Filed.

Per Set. Consists of One 12 in. Compass Blade.

No. 1 Set—Consists of One 12 in. Compass Blade, One 10 in. Mitre Blade, One 16 in. Cross Cut Wood Blade and One Adjustable Handle, Weight Per Set 14 Lbs......\$2.00

## COPING SAWS

Adju Nickel Steel Bac Handle, C

Adjustable to All Angles

Nickel Plated, Cold Rolled Steel Back, Varnished Hardwood Handle, Complete with One Blade.

Per Dozen

#### EXTRA BLADES FOR No. 50 COPING SAW

#### 

#### Bright Steel, Tempered and Sharpened

Per Dozen

#### Nickel Plated Steel Wire Frame and Handle

Per Dozen

No. 100—6 in. Frame, 4 in. Deep, Handle 4 in. Long, Complete with 1 Dozen 6 in. Bent End Blades, Wt. Dozen 4 ½ Lbs. . \$3.00



One-half Dozen in a Box

#### EXTRA BLADES FOR No. 100 COPING SAW

Per Gross

No. 50—6 in, Long, Blued Steel, Tempered and Sharpened, Bent Ends, Weight Per Gross 4 Oz......\$2.00 One Dozen in a Bundle, One Gross in a Box.

## FRET SAW SETS



Nickel Plated

Spring Steel
Frame. Enameled
Wood Handle, Patent Clamps which
hold blades securely.
Set consists of Saw
Frame. 12 Blades.
1 Awl, 1 Sheet Impression Paper and
3 Sheets of Designs. Per Set

No. 2—12 in, Deep, 5 in, Wide, Weight Each 17 Oz. 81.50 One Set in a Box.

## FRET SAW BLADES

1	***************************************
3	
5	
6	
7	
8	
9	
40	

For Wood Work, 5 in. Long Cut Fast, Smooth and are of Uniform Quality.

2 22 Nos, ..... 1 Per Gross..... \$1.70 1.70 1.70 1.80 1.80 1.80 12 Nos. . . . . . . . . . . . . . 9 10 11 8 7 2.00 2.00 Per Gross..... \$1.90 1.90 1.90 2.00

#### SCROLL SAWS



#### MILLERS FALLS

#### With Emery Wheel and Drill Chuck

Two Balance Wheels, one each of Iron and Emery. Arms swing on Pivots in Supporting Casting Giving Free Action and are Adjustable so they can be kept Parallel. Cast Iron Frame, Steel Arbors, Selected Ash Wood Arm and Pitman, Japanned Tilting Table.

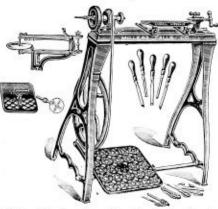
No. 387—37 in. High, Depth of Arms 18 in., Capacity Up to 3 in. Wood, Weight Boxed 60 Lbs., \$17.75

#### WOOD LATHE AND SAW

MILLERS FALLS-GOODELL

#### For Amateur Work

Five in. Swing. 14 in. Between Centers, T w o Grooves on Drive Wheel Cone Pulley Permits a change of Speed. Head has 2 in. Face Plate and Spur Center and Screw Center for Turning Cups. Tail Stock has Screw Feed and can be Clamped at Any Point. Equipped with



Drill Spindle with 3 Jaw Chuck. Capacity 0 to ¼ in., Short Tool Rest, Emery Wheel 4x¾ in., Five Turning Tools, Wrench and Drill Points.

No. 321—With Fret and Circular Saw Attachment, Net Weight 60 Lbs......\$32.50

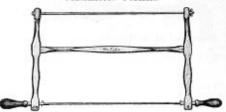
#### TURNING OR WEB SAW BLADES

Set and Sharpened, Ready for Use

8 in. Long,	22 Gauge	
Width, Inches		1/4
Points Per Inch		9
Per Dozen \$2	2.60 2.6	0 2.60
10 in. Long,	22 Gauge	
Width, Inches	1/8 1/6	1/4
Points Per Inch	10 10	9
Per Dozen \$2	2.80 2.8	0 2.80
12 in. Long,	21 Gauge	
Width, Inches	Pa 1/4	758
Points Per Inch	10 9	7 1/9
Per Dozen \$3	3.00 3.0	0 3.00
14 in, Long,	21 Gauge	
Width, Inches	3 14	- 80
Points Per Inch		7 1/2
Per Dozen \$3	3.20 3.2	
16 in. Long,	20 Gauge	
Width, Inches		36
Points Per Inch	10 8	
Per Dozen \$3	3.60 3.6	
18 in, Long,	20 Gauge	
Width, Inches	1/4 1/4	3/8 1/2
Points Per Inch	8 7 1/2	7 1/4 7
Per Dozen	84.00 4.00	4.00 4.00

#### TURNING SAW FRAMES

MILLERS FALLS



No. 357—Birchwood Frame, Ebonized Handles

Steel Extension Rod, Complete with Blade & in. Wide.

Length	Blade,	Inches			14	18
		Lbs			1 3/8	1 %
Each .					\$1.70	1.80
		O	ie in a	Box.		

#### WOOD SAWS

SIMONDS



#### Single Brace

Red Painted Frame, Plain Rod, Polished Blade, Plain Tooth.

Per Dozen

No. 107 20 in Plate 2 in With Which Per Dozen



Red Painted and Varnished Double Riveted Fame, Tinned Rod, Thin Back Polished Blade, Plain Tooth.

#### WOOD SAW BLADES



#### Straight Breast, Plain Tooth

#### BUTCHERS SAWS

DISSTON



#### No. 70-Flat Back

Polished Steel Frame, Steel Screws, Beechwood Handle, Polished Edge, Blued Steel Blade.

 Length Blade, In.
 18.
 20
 22
 24
 26

 Wt. Dozen, Lbs.
 24
 27
 30
 33
 36

 Per Dozen.
 \$20.50
 21.50
 22.50
 24.00
 26.00

 One-third Dozen in a Box.

## KITCHEN SAWS



#### No. 0-Round Back

 Polished Steel Frame, Bright Blade ¾ in. Wide.

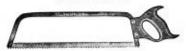
 Length, Inches
 16

 Weight Per Dozen, Lbs
 17

 Per Dozen
 \$8.50

 One-half Dozen in a Box.

#### CHALLENGE



#### No. 12-Flat Back

 Polished Steel Frame, Bright Steel Blade Beechwood

 Handle, Two Screws.

 Length, Inches
 14

 Weight Per Dozen, Lbs.
 15

 Per Dozen
 87.25

## One-half Dozen in a Box. BUTCHERS SAW BLADES

IN COILS



Cast Steel, Blued

Set ready for use, 11 Points to the Inch.

Weight Per Coil 2 Pounds. Twenty-five Feet in a Coil.

#### SAW PUNCHES

MIDGET



For Punching Holes in Butcher Saw Blades, etc., Not Heavier than 22 Gauge

 Nos.
 1
 2

 Length, Inches
 6½
 6½

 Weight Each, Oz.
 14
 8

 Each
 \$1.50
 1.00

One in a Box.

## PRUNING SAWS



#### Perfect Temper, Superior Quality

Narrow Crucible Steel Blade, Beechwood Handle, Varnished Edges, Two Brass Screws and Medallion.

Per Dozen

One-third Dozen in a Box.

#### DISSTON DUPLEX



Weight Per Dozen, Lbs. 12 13
Per Dozen \$23.00 24.50

One-third Dozen in a Box,

#### AVERY DUPLEX



#### No. 40-Double Edge

 Cast Steel Blade, Beechwood Handle, 3 Brass Screws.

 Length, Inches
 18
 20

 Weight Per Dozen, Lbs
 12
 13

 Per Dozen
 \$15.00
 16.00

One-third Dozen in a Box.

#### PRUNING HOOK AND SAW

LITTLE GIANT



#### Can be Used with or without Pole

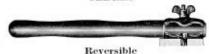
Crucible Steel Knife and Saw. The Saw can be Detached when not in Use. The Hook will Take a Branch % in. Diameter.

The saw-blade is attached to the hook by means of two clamp-screws as shown in the cuts, which also show the method of attaching a pole or handle.

One-sixth Dozen in a Box.

#### CROSS-CUT SAW HANDLES

CLIMAX



Hardwood, Gray Iron Castings, Malleable Iron Bolt and Nut.

Per Pair

No. 103-13 1/2 in. Long, 1 3/4 in. Diameter, Weight 

Open Stock.



Hardwood, Malleable Iron Washer, Ferrule, Loop Rod and Inside Nut.

No. 108-10% in. Long from Top of Handle to Bottom of Washer, 1% in Diameter, Weight Per 

Open Stock.

#### REVERSIBLE



Double Grip

Hardwood, Heavy Malleable Iron Castings, Loop Rod. Per Pair No. 113-14 1/2 in. Long, 175 in. Diameter, Weight Open Stock.

ONE MAN



#### Beechwood, Varnished Edges

Per Dozen No. 218-Weight Per Dozen 6% Lbs... ....84.00 One Dozen in a Box.

#### SUPPLEMENTARY



#### Seasoned Hardwood Stock

Steel Ferrule and Socket, Malleable Iron Bolt. No. 118-51/4 in Long, 1 % in Diameter, Weight Per Dozen 3 ½ Lbs......\$3.00 One Dozen in a Box.

#### HAND SAW HANDLES

COMMON



#### For Panel, Hand or Rip Saws

When ordering, always state length of saw for which the handle is required. No. 66-Beechwood, Slit Only..... ....83.50 One Dozen in a Box.

#### DISSTON



#### For Panel, Hand or Rip Saws

When ordering, always state length of saw for which the handle is required. No. 7-Beechwood, Slit Only, for No. 7 Disston Saws
No. D8—Applewood, Bored and Slit for No. D8 Disston Saws ..... No. 12-Applewood, Carved, Bored and Slit for No. 12 Disston Saws.... . 15.50 No. 16-Applewood, Carved, Bored and Slit for No. One Dozen in a Box.

#### SAW SCREWS









Nos. 3 and 4.

For Panel, Hand or Rip Saw Handles.

	Per Doz	
No.	1-Centennial, Brass, 1/2 in. Diameter Head 50.	50
No.	2—Centennial, Brass, 16 in. Diameter Head	55
No.		75
No.		85
	One Dozen in a Box.	

#### ARBORS

SAW OR GRINDING WHEEL



Tool Steel, Polished

Convenient for Holding Grinding Wheels or Saws in Lathe.

	321	322	323	324
Length, Inches	4	4 %	7	10
Diameter, Inches	3/8	1/2	3/4	1
Opening Between Flanges, In.	1/2	1/2	34	1
Diameter Between Flanges, In.	3/8	1/4	1/6	3/4
Each 8	1.00	1.00	1.40	3.30
One in a	Box.			

#### CIRCULAR SAWS

#### SIMONDS SOLID TOOTH



Filed and Set Ready for Use, Patent Ground and Tempered

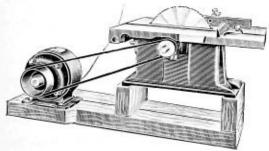
When ordering Circular Saws, state if Cross Cut or Rip, also Diameter in inches and size of Mandrel Hole.

All sizes less than 6 in. diameter take list of 6 in. saw. Sizes listed are standard Stock Saws, other sizes or gauges furnished to order.

-2000					
Diameter, Inches.	6	8	10	12	14
Thickness, Gauge	18	18	16	15	1.4
Hole, Inches	3/4	76	1	1	1 1/8
Wt, Each, Lbs	34	7/8	1 1/2	2 1/2	3 3/2
Each	\$3.30	4.40	5.60	7.00	8.50
Diameter, Inches.	16	18	20	22	24
Thickness, Gauge	14	13	13	12	11
Hole, Inches		1 34	1 %	1 %	1 3/8
Wt. Each, Lbs	4 1/2	6	7	10	13
Each	\$10.50	12.50	15.00	17.50	20.50

#### BENCH SAWS

TOBRIN



#### Motor Driven

Designed for ripping, cross cutting and mitering stock up to 2½ in. thick. The table elevates for grooving and may be tilted to 10 degrees for beveling. Equipped with 8 in. Combination Saw, Endless Belt, ¼ H. P. Motor, 10 ft. of Cord and Attachment Plug.

#### BAND SAWS

LENOX WOOD CUTTING



#### Punched, Filed and Set

Width, Inches	14	36	36	96	34	78	1
Gauge	22	22	21	21	21	21	2.0
Points Per Inch.	6	5 1/2	5	4 1/2	4	4	3 1/2
Per Foot	80.13	.14	. 15	. 16	.18	. 20	. 20
Brazing Extra					E	ach. S	0.50

#### BAND SAWS

LENOX METAL CUTTING



#### Flexible Back, with Hardened Teeth

The Teeth require no filing and will cut until worn dull. Furnished 8, 10, 12, 14, 18, 24 and 32 teeth to the inch.

Width, Inches	34	36	32	96	34	1
Thickness, Inches	.025	.025	.025	.032	.032	.035
Gauge Nos	23	23	23	21	21	20
Feet Per Lb	60	35	25	16	1.2	9
Per Foot	\$0.07	.08	.09	. 11	. 13	. 16

#### Special Flexible Back for Bronze

Brazing, Extra ...... Each, \$0.50

Designed in such a manner as to possess an unusually Keen Tooth and long life. They cut brass and bronze castings readily and rapidly with a fine singing cut.

Furnished 10, 12 or 14 teeth to the inch.

Width, Inches	34	36	36	96	34	1
Thickness, Inches	.025	.025	.025	.032	.032	.035
Gauge Nos	23	23	23	21	21	20
Feet Per Lb	60	35	25	16	12	9
Per Foot	80.07	.08	.09	. 11	.13	. 16

Brazing, Extra ...... Each, \$0.50

#### Spring Temper, Bright Finish, Resharpenable

Tempered for cutting Aluminum, White Metals, Fibre. Yellow Brass and other Special Compositions. Furnished 4, 5, 6, 8, 10 and 12 teeth to the inch.

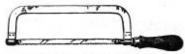
Width, Inches	34	38	12	98	34	1
Thickness, Inches	.025	.025	.025	.032	.032	.035
Gauge Nos	23	23	23	21	21	20
Feet Per Lb	6.0	35	25	16	12	9
Per Foot	80.13	.14	. 15	. 16	. 18	. 22

#### Suggestions Applying to the Use of "Lenox" Metal Cutting Band Saws

Cutting Band Saws	4	
	Speed in	No. of
	Running ft.	Teeth
Material to be Cut	per Minute	per Inch
Annealed Tool and H. S. Steel	125-150	14 - 12
Machinery and C. R. Steel		14-10
Bronze and Hard Brass	A STATE OF THE STATE OF	14 - 12
Soft Yellow Brass	200-300	14 - 12
Aluminum	300-400	10 - 8
Sheets and Tubing not less than 1/8		
in, Thick	Action to the second	18
Sheets and Tubing less than 1/8 in	150-200	24
Brass Sheets and Tubing		24 - 18
Brass and Bronze Castings		14 - 12
Drill Rod and Light Tool Steel Bars		24 - 18

#### HACK SAW FRAMES

#### STARRETT



#### Polished and Nickel Plated

Solid Steel Frame, Stained Hardwood Handle, Blades can be Set to Cut in Four Directions and Tightened by Simply Turning the Handle. Complete with Blade.

Nos	141A	141B	141C
For Blade, Inches	8	10	12
Each	\$0.85	1.00	1.10
One in	a Box.		

#### STARRETT EXTENSION



#### Polished and Nickel Plated

Solid Steel Frame, Stained Hardwood Handle, Improved Extension Back, Blade Automatically Held in Place and can be Faced in Four Directions, Tightened by Turning Handle. Complete with Blade.

#### MILLERS FALLS ADJUSTABLE



#### Polished and Nickel Plated

Sciid Steel Frame, Cocobolo Handle, Set Screw Adjustment, Blades Tightened by Turning Handle and can be Faced in Four Directions. Complete with One 10 in. Blade. Scale for Different Lengths Marked on Back of Frame.

No. 10—Adjustable 8 to 12 in., Weight Each 1 ½ Lbs. \$2.25 One in a Box.

#### MILLERS FALLS SOLID BACK ADJUSTABLE



#### Polished and Nickel Plated

Solid Steel Frame, Cocobolo Handle, Adjustable by Means of Sliding End Post, Blades Tightened by Turning Handle and can be Faced in Four Directions. Complete with One 12 in, Blade.

No. 6—Adjustable 8 to 12 inches, Weight Each 23 Oz. \$2.25 One in a Box.

#### MILLERS FALLS PISTOL GRIP EXTENSION



Thumb Screw Adjustment

Blade May be Faced in Four Directions. The Handle Fits Any Size Hand.

One in a Box.

#### HACK SAW FRAMES

UNIVERSAL PISTOL GRIP



#### Sheradized to Prevent Rust

An All Metal Frame of Exceptional Strength. Back One Piece Solid Steel, will Not Bend or Buckle.

Entire Frame is Sheradized to prevent rust, and for this reason is particularly adapted for outdoor use.

"Pistol Grip" Handle affords firm, comfortable hold and eliminates hand cramp.

Stop Pin prevents frame from sliding out of handle.

Complete with Blade.

#### UNIVERSAL EASY GRIP



#### Polished and Nickel Plated

Special Black Composition Handles, Blades Strained by Thumb Nut and Faceable in Four Directions. Back One Solid Piece, with One 10 in. Blade.

No. 12—Adjustable 8 to 12 in., Weight Each 2 Lbs. \$3.15 One in a Box.

#### BURRO PISTOL GRIP



#### Nickel Plated, Satin Finish

Black Rubberoid Finish Wood Handle Blade Faces in Four Directions.

#### SIMONDS EXTENSION



#### Polished and Nickel Plated

Heavy Steel Frame, Enameled Hardwood Handle, Patent Handle Adjustment, Blade Faces in Four Directions. Complete with Blade.

No. 40—Adjustable 8 to 12 in., Weight Each 1% Lbs. \$1.75 One in a Box.

#### SIMONDS STRAIGHT CUT EXTENSION



#### Polished and Nickel Plated

Easy Grip Rubberoid Handle, Blade Faces in Four Directions. Complete with Blade. Each
No. 41—Adjustable 8 to 12 in., Weight Each 1 1 Lbs. \$2.50

One in a Box.

#### HACK SAW FRAMES

UNION ADJUSTABLE



#### Cold Rolled Steel Frame

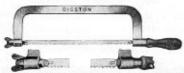
Adjustable One-Piece Back, Blades Strained by Turning Thumb Screw at End of Frame and can be Faced in Four Directions, Nickel Plated Stock, Mahoganized Hardwood Handle, without Blade.

No. 50—Takes 8 to 12 in. Blades, Weight Each 1 Lb. \$0.50

The adjustable feature is obtained by the use of a pin
set in the edge of the long end of the frame.

One in a Box.

#### DISSTON REVERSIBLE



#### Heavy Pelished Steel Frame

Hardwood Handle, Blades Reversible in Four Directions, Depth of Frame 3 % in. Each No. 1—Takes 12 in. Blade, Weight Each 2 ½ Lbs...\$2.75 One in a Box.

#### MILLERS FALLS HEAVY REVERSIBLE

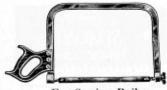


#### For Heavy Work on Rails, Girders, Etc.

Nickel Plated Steel Frame, Stained Hardwood Handle, Blade Faceable in Four Directions. Complete with 12 in. Blade. Each

No. 15—Takes 12 in. Blade, Stock 1x 1/4 in., Depth of Frame 5 1/4 in., Weight Each 2 1/2 Lbs......\$2.90 One in a Box.

#### SIMONDS RAIL



#### For Sawing Rails

Heavy Steel Frame, Nickel Plated, Beechwood Handle.

Complete with 12 in. Blade.

Each

No. 21—Takes 12 in. Blades, Frame 10 1/4 in. Deep,

#### DISSTON RAIL



#### Double Handles

For Sawing Rails, Iron Beams, etc. Polished Steel Frame, Hardwood Handles. Each No. 10—Takes 18 in. Blades, Weight Each 6 Lbs. \$3.50 One in a Box.

## HACK SAWS



#### A Free End, Double Edge, Rigid Saw

Tungsten Steel Blade, Hardened and Tempered Adjustable Tool Steel Handle. Each

No. 201—Upper Edge 32 Points Unset Teeth, Lower Edge 20 Point Set Teeth, Complete with 2 Extra Blades in a Holster.....\$1.50

#### SPRAGUE STIFF BACK



Adjustable

Frame can be adjusted to any blade, any place. For sawing in a small hole or close place. Par in Frame, Leg 3 14 in. Long Hardwood Handle, Polished Frame, Blade can be set at 45 and 90 degree angle.

One in a Box.

## JEWELERS SAW FRAMES



Plain Forged Steel

Steel Clamps, Hardwood Handle, Adjustable 4 to 6 in.

Nos								្		į	٠		1046-2	1046-4
Depth, Inches			 		,				,				2	3
Weight Each.													3	4
Each		. ,											\$0.85	1.25

Blade Not Included.

#### JEWELERS SAW BLADES

## SCREW SLOTTING BLADES SIMONDS



#### For Cutting Slots in Screw Heads

Can be used in any Adjustable or 8 inch Hack Saw Frame. They are thick at the tooth edge and concave making them thinner at the back, which gives good clearance and prevents binding.

Nos	8A	8B	8C	SD
Length In	8	8	8	8
Width, In	1/2	1/2	1/2	1/2
Thickness, In	.109	.083	.065	.049
Weight Dozen, Oz	17	14	11	9
Per Dozen	\$3.50	3.50	3.50	3.50

#### HACK SAW BLADES

#### LENOX ALL HARD



#### For Hand Frames

The "Lenox" All Hard Blade is the style usually selected for the most efficient production and service.

#### Standard List, All-Hard Hand Blades

Lgth	Width,		Teeth	Per Gross
In.	In.	Thickness	Per Inch	List
8	3,6	.025 or 23 Ga.	18, 24, 32	\$ 8.00
9	1/0	.025 or 23 Ga.	18, 24, 32	9.00
10	14	.025 or 23 Ga.	18, 24, 32	10.00
12	1/2	.025 or 23 Ga.	18, 24, 32	12.00
12	18		14, 18, 24, 32	12.00
12	16		14, 18, 24, 32	15.24
	140	One-half Gross in	a Box.	

#### LENOX FLEXIBLE



#### For Hand Frames

The "Lenox" Flexible Blade is hardened on the teeth only, the back being left soft which prevents breakage. We recommend them particularly to Plumbers, Electricians, and Garage Mechanics. Because of their unbreakable quality and the abuse they will stand, many machine shops prefer them for use by unskilled workers or where awkward cutting positions are encountered.

#### Standard List, Flexible Hand Blades

Lgth.,	Width,		Teeth	Per Gross
In.	In.	Thickness	Per Inch	List
8	1/2	.025 or 23 Ga.	18, 24, 32	\$ 8.00
9	1/2	.025 or 23 Ga.	18, 24, 32	9 00
10	3/2	.025 or 23 Ga.	18, 24, 32	10.00
12	10	.025 or 23 Ga.	14, 18, 24, 32	12.00
	2.0	One-half Gross in	a Box.	

#### LENOX POWER



For Light	Power	Machines
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Lgth	Width,		Teeth	Per Gross
In.	In.	Thickness	Per Inch	List
10	56	.028 or 22 Ga.	14, 18	814.40
12	5/8	.028 or 22 Ga.	14, 18, 24	16.80
12	5/8	.032 or 21 Ga.	14, 18, 24	17.88
12	3/4	.032 or 21 Ga.	14, 18, 24	21.36

#### For Heavy Power Blades

"Lenox" Heavy Power Blades are built to fill every requirement of the modern high speed hack saw machine. For straight cutting, durability, and uniformity, they are unexcelled.

#### Standard List, Heavy Power Blades

Lgth	Width,		Teeth	Per Gross
In.	In.	Thickness	Per Inch	List
12	3/4	.049 or 18 Ga.	10, 14	\$28.92
12	1	.049 or 18 Ga.	10,14	37.92
14	34	.049 or 18 Ga.	10, 14	33.12
14	1	.049 or 18 Ga.	10, 14	43.56
14	1	.065 or 16 Ga.	7, 10	50.88
16	1	.049 or 18 Ga.	10,14	49.08
17	1	.049 or 18 Ga.	10,14	51.72
17	1	.065 or 16 Ga.	7,10	59.52
18	1	.049 or 18 Ga.	10, 14	54.36
18	1	.065 or 16 Ga.	7, 10	62.04
20	1	.065 or 16 Ga.	7, 10	67.92
24	1	.049 or 18 Ga.	10, 14	70.32
24	1	.065 or 16 Ga.	7, 10	79.32
24	1 1/2	.065 or 16 Ga.	7, 10	119.04
				72.74

All Blades measure from center to center of holes except the 14 and 17 inch lengths which measure  $13\,1/2$  and  $16\,1/2$  inches respectively.

#### SIMONDS ALL HARD



#### For Hand Frames

An Exceptionally High Grade All Hard Blade, Made for Hard, Continuous Service.

Length, Inches	8	9	10	12
Width, Inches	1/2	1/2	1/2	1/2
Gauge 2	3-025	23025	23-025	23
Teeth Per Inch-				
Regular				14
Medium	18	18	18	18
Fine	2.4	24	24	24
Extra Fine.	32	32	32	32
Per Gross	\$8.00	9.00	10.00	12.00

One-half Gross in a Box.

#### SIMONDS SOFT BACK



#### For Hand Frames

Soft Back and Hard Edge—Flexible—will bend and will not shell teeth. Will do the work of an All-Hardened Blade, also the work of so-called Flexible Blades, Toughened by Special Process.

Length, Inches	8	9	10	12
Width, Inches	1/2	1/2	1/2	1/2
Gauge	23025	23025	23025	23-025
Teeth Per Inch-				
Medium	18	18	18	18
Fine	24	24	24	24
Extra Fine	32	32	32	32
Per Gross	88.00	9.00	10.00	12.00
	One-half G	ross in a l	Box.	

#### SIMONDS POWER



#### For Light Power Machines

Lgth.,	Width,		Teeth	
In.	In.	Gauge	Per Inch	Per Gross
12	5/8	21-032	14	817.88
12	34	21032	14	21.36
14	%	21,032	14	24.36
	One	-half Gross in	a Box.	

#### For Heavy Power Machines

Lgth.,	Width,		Teeth	
In.	In.	Gauge	Per Inch	Per Gross
12	34	18049	9	\$28.92
12	34	18049	14	28.92
14	34	18-049	9	33.12
14	1	18049	9	43.56
17	1	18049	9	51.72
17	1	16065	9	59.52

18 Gauge, 1/3 Gross; 16 Gauge, 1/4 Gross in a Box.

Regular—For Cutting Soft Steel, Iron Solids and Rails-Medium—For Cutting Tool Steel, Iron Pipe, Hard Metals and Light Angle Irons.

Fine—For Cutting Brass, Copper, Drill Rod, Medium Tubing and Sheet Metals.

Extra Fine-For Cutting Thin Tubing and Thin Sheet Metals.

#### HACK SAW BLADES

#### MILFORD ALL-HARD

## MILFORD

#### For Hand Frames

			T	eeth F	er Inc	h	
Lgth.	Width	Thickness	Reg-	Me-		Tub-	Per
In.	In.	Gauge	ular	dium	Fine	ing	Gross
8	yla	.025 or 23		18	22	3.2	\$ 8.00
9	vie	.025 or 23		18	22	32	9.00
10	1/2	.025 or 23	4.4	18	22	32	10.00
12	1/2	.025 or 23	0.000	18	22	3.2	12.00
12	115	.025 or 23	14	18	22		.12.00
14	26	.028 or 22	1.4	18	22		17.52
		One-half	Gross	in a	Box.		

#### For Hand Frames or Light Power Machines

		Teeth Per Inch							
Lgth. In. 12	Width In.	Thickness Gauge . 028 or 22	ular	dium	Fine		Per Gross \$15.24		
		One-half	Gross	in a	Box.				

#### MILFLEX SOFT BACK



#### For Hand Frames

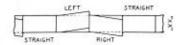
Designed for difficult sawing, where all hard blades are liable to break.

They are particularly recommended to plumbers, electricians and for garage work,

	Teeth Per Inch						
Lgth.	Width In.	Thickness Gauge	Reg- ular	Fine	Tub- ing	Per Gross	
8	Ta:	.025 or 23	18	22	32	\$ 8.00	
9	To.	.025 or 23	18	22	32	9.00	
10	1/4	.025 or 23	18	22	32	10.00	
12	1/2	.025 or 23	18	22	32	12.00	

One-half Gross in a Box.

Milflex Blades 18 Teeth are furnished with Straight-Right-Left Hand Set as illustrated.



Milflex Blades 22 Teeth are furnished with "Wavy" Set as in the following illustration.



Actual practice indicates the best uses for the different teeth as follows:

- 14 Teeth-For cutting soft steel, cast iron, bronze, etc.
- 18 Teeth-For tool steels, high speed steels, small solids.
- 22 Teeth-For brass, iron pipe, heavy tubing, BX and electrical conduit.
- 32 Teeth-For very thin tubing, light BX, thin sheet metals, flush pipe, wiremold, etc.

When teeth are not specified, 22 teeth will be supplied.

#### MILFORD POWER



#### For Use in Heavy Power Hack Saw Machines

Length, Inches 12	12	12	14
Width, Inches %	3/4	1	34
Thickness, In 032-21	.049 - 18	.049-18	.049-18
Teeth Per Inch., 14-18	14	14	10
Per Gross \$17.88	28.92	37.92	33.12
Length, Inches	17	17	20
Width, Inches	1	1	1
Thickness, Inches	-049 - 18	.065 - 16	.049 - 18
Teeth Per Inch	10-14	10	10
Per Gross	851.72	59.52	59.52

21 Gauge, Half Gross; 18 Gauge, One-third Gross; 16 Gauge, One-quarter Gross in a Box.

Blades 14 in, and longer, in widths 3 to 1 in. inclusive, measure ½ in. less between centers of holes than lengths specified in foregoing lists, except 16 in. which measures full 16 in, between centers.

Blades  $1\frac{1}{4}$  and  $1\frac{1}{2}$  in, wide, measure between centers exactly the lengths specified.

When specifying, it is essential to state Length, Width, Thickness and Teeth per inch. If teeth are not specified Stock Teeth will be supplied.

Should it not be clear what Teeth to specify, details should be given in respect to Shape and Type of Material to be cut, and whether for use in Hand Frame or Power Saw Machine, stating Make of Machine whenever possible. Blades can then be furnished which actual practice indicates as best suited to the work.

#### MILFLEX-MIDGET



#### For Use in Jewelers Frames

Soft Back with Hard Teeth, Practically Unbreakable, Very Durable, Cut Rapidly and Smoothly.

Length, Inches	 6
Width, Inches	
Thickness, Gauge	 .014 or 28
Teeth Per Inch	 3.2
Per Gross	

One-half Gross in a Box.

#### SCREW SLOTTING BLADES



#### For Use in Hand Hack Saw Frames

Special Alloy Steel, Hardened, Thin Backs, 8 in. Long, ½ in. Wide, Straight Teeth.

Nos	8A	SB	SC	SD
Thickness, Inches		16	:72	1/8
Per Gross	\$33.00	35.00	37.00	39.00
Set-4 Sizes, One Each	of Above		. Per Set.	\$1.00

Every machine shop has frequent occasions for cutting slots in screw heads, bolts, set screws and parts of machinery. These blades are designed to perform this service.

#### MITRE BOXES

LANGDON ACME



With Adjustable Guides

Japanned Cast Iron Frame, Malleable Iron Legs, Adjustable Saw Guides Support Saw Above the Work, Degree Graduation, Spring Lever Clamp to Hold Saw at Any Angle Set, Stock Guides, Length Gauge, Depth Gauge and Extension Lever.

Take Up Provides for Wear on Saw, Checkered Bottom Board (Prevents Work from Slipping), Disston Mitre Saw.

Nos	68	69	72
Sizes	1	1	2
Saw, Inches	22x4	24x4	24x4
Right Angle Cap., Inches	7 1/2	7 1/2	10 14
Mitre (45°), Inches	5	5	7
Weight Boxed, Lbs	34	3.5	3.5
Net Weight, Lbs	23	23 1/2	23 1/2
Each, with Saw	\$21.15	22.00	28.75
Nos	73	74	75
Sizes	2	2 1/2	2 1/2
Saw, Inches	26x4	28x5	30x5
Right Angle Cap., Inches		10 %	10 14
Mitre (45°), Inches	7	7	7
Weight Boxed, Lbs	36	37	38
Net Weight, Lbs	24	25	25 1/2
Each, with Saw		27.25	28.95

A graduated arc upon the bed and an index plate tell at what degrees to set the saw for certain desired cuts.

A simple and effective device automatically catches the saw guides and holds them suspended when they are raised to their highest point and releases them instantly when desired.

Notches in the bed plate determine the positive angles most in use.

By the use of a thumb lever at the front of the box the saw supports may be swung freely and locked at either a positive or an intermediate angle.

One in a Box.

#### GOODELL ALL-STEEL

#### With Back Saw Angle Attachment and Depth Gauge

The saw when elevated is held in place by a spring lock which is easily released by a slight downward pressure.

Angles are correctly indicated on the graduated arc by means of a small brass pin in the saw lever.



Angles more acute than 45 degrees are obtained by an extra angle attachment fastened to the left side of the box. This attachment can also be used as a molding holder. A length gauge is fastened to the right side of the box. This can be quickly set in position for cutting duplicate pieces of any length up to 20 in.

All sizes have a capacity of 10 1/2 in. at right angles and 71/2 in. at mitre.

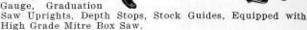
Nos	1244	1264	1285	1305
Saw, Inches		26x4	28x5	30x5
Net Weight, Lbs	2.0	21	24	25
Weight Boxed, Lbs	3.0	31	3.5	37
Each, with Saw	\$24.50	25.50	27.50	28.60

One in a Box.

#### MITRE BOXES

#### STANLEY With Adjustable Guides

Japanned One Piece Cast Iron Frame, Malleable Adjustable . Legs. Saw Guide Supports Above the Saw Work, Degree Graduation, Length Graduation Gauge.



Small Frame

Will Cut Mitre (45°) on Work up to 51/2 in.

Nos	240	242	244	246
Size Saw, Inches		22x4	24x4	26x4
Weight Each, Lbs	31	32	33	34
Each, with Saw	\$22.30	22.85	23.35	23.95

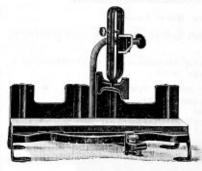
Medium Frame

Will Cut Mitres (45°) on Work up to 6 1/2 in. Each No. 358—28x5 in. Saw, Capacity at Right Angle 9  $\frac{1}{2}$  in., Capacity at Mitre (45°) 6  $\frac{1}{2}$  in., Capacity at Angle (30°) 4 % in., Weight Each with Saw 40 Lbs......\$27.40

STANLEY ALUMINUM Each

No. A358-Same as Regular No. 358 Mitre Box, Except Most Parts are Aluminum, Weight Each with Saw 15 Lbs..... .....\$36.00 One in a Box.

#### MILLERS FALLS OPEN FRONT



Made Entirely of Steel

Black Japanned Frame, Red Enameled Saw Guide, Nickel Plated Trimmings, One Piece Frame and Legs. Adjustable Saw Patent Guide, Squaring Device, Swivel Arm Notched for all Positive Angles, Clamping

Device for Intermediate Angles, Roll to Prevent Saw from Marring Bottom Board. Each

No. 110-Without Saw, Weight Each 9 Lbs. \$6.70 One in a Box.

#### VICTOR

#### Without Saw

Black Japanned Cast Iron Frame, Malleable Iron Legs, Steel Guide Rods.

Each

No. 50 1/2 -Without Saw, Capacity at Right Angle 7 1/4 in., Capacity at Mitre 45°, 4 3/4 in., Weight Each 20 Lbs......\$10.95

Either a back saw or a panel saw can be used in this box. The back, frame, indexed quadrant and swivel arm bearing are in one piece and accurately machined. The swivel arm can be locked at any desired point between zero and 45°. The quadrant is indexed for cutting 4, 5, 6, 8, 12 and 24 sided pieces.

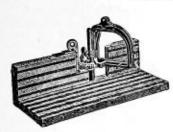
The saw guide uprights are securely clamped in the sockets in the swivel and can be adjusted to hold the saw without side play, thus insuring great accuracy in working.

Movable stops are attached to the saw guide uprights permitting the saw to cut only to the desired depth.

One in a Box.

#### MITRE BOXES

#### PERFECTION



#### Without Saw

Box Made of Inlaid Fancy Wood, Highly Finished, Japanned and Nickeled Trimmings, Any Saw May be Used, Back, Panel or Hand.

Each

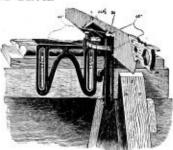
By means of the sliding key (exactly adjusted between bearings) the saw guide can be set to the angles more commonly used, indicated on the dial by letters M. P. H. O. W. R. W. O. H. P. M. viz.: R. right angle or square cut. M. mitre or 45 degrees. P. pentagon or 36 degrees. H. hexagon or 30 degrees, O. octagon or 22½ degrees. W. to match usual door and window sill pitch, 9 degrees.

Two in a Box.

#### RED DEVIL

#### Can be Folded for Carrying in Tool Case

Red Enameled Steel Frame, Nickel Plated Steel Gauge. Cuts any width of Mitre, makes perfect joints. Adjustable to cut square or at angles of 22½, 30 or 45 degrees. No special saw required.



Each

No. 159—Without Saw, Weight Each 2 ½ Lbs......\$5.00
One in a Box.

#### GEM FOLDING

#### Adjustable Nickel Plated Saw Guides



Thoroughly Seasoned Oak. Adapted to Any Size or Style of Hand or Back Saw. Occupies Small Space in Tool Box. Easily and Quickly Adjusted.

Each

No. 1G-14 in. Long, Height of Back 3 in., Takes Moulding Up to 2½ in., Weight Each 4 Lbs....\$3.00 One in a Box.

#### REGULAR WOOD



#### Kiln Dried Hardwood, with Mitre and Straight Cuts

18	24
3 3/8	3 %
2 %	3 1/8
1.00	1.25
	3 3/8 2 5/8

Open Stock.

#### MITRE MACHINES



Complete with Saw, Rule, Gauge and Auxiliary Clamps A strong and compact tool originally designed for the joining of picture frames, but now used extensively for all classes of woodwork.

Any type of mitered joint may be readily cut, glued and nailed; and close, tight-fitting corners can be assured.

Each

No. 1—Will Saw Moulding 4 ½ in. Wide and Smaller, Will Clamp Any Frame 7 ½ x7 ½ in. or Larger, with Saw 26x4 ½ in., Weight Each 20 Lbs... \$20.75

These low or auxiliary clamps are slipped over the regular clamps for certain types of mouldings that are not readily gripped by the latter. High back mouldings can be held rigid and sawed as easily as simpler patterns. The saw may be reversed and frames cut from either front or back. The rule may be placed on either side of the machine making it possible to cut the opposite sides of frame to exactly the same lengths.

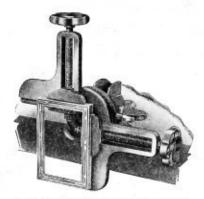
The universal back permits the frame to be tilted or swung into the position most convenient for nailing.

The saw is held above the work by detent springs, enabling the work to be adjusted without taking saw from the machine.

One in a Box.

#### MITRE VISES

MARSH



With Swinging and Tilting Base

Holds a frame in proper position for nailing with greatest ease possible. The vise has swivel and tilting attachments and can be swung or tipped in any position desired. Each

One in a Box.

#### BIT BRACES

#### YANKEE

Nickel Plated, Hard Rubber Handle



Noiseless Ratchet, Quick Positive Shifter, Quick Centering Ball Bearing Chuck, Hardened Tool Steel Pawls, Dust and Moisture Proof Ratchet Case, Steel Clad Head, Chucks hold any bit up to 1/2 in. diameter.

Nos	2100A	2100B	2100C	2100D
Sweep, Inches		10	12	14
Weight Each, Lbs	3	3 1/6	3 14	3 16
Each	\$8.80	9.00	9.25	9.75
Each	\$8.80	9.00	9.25	9.70

On the 14 in, brace the hole in the end of the chuck is larger to take bit shank % in, square for ship augers and large auger bits.

One in a Carton, Three in a Box.

Note—A Self-Demonstrating Display Stand is furnished free with each order for three braces.

#### MILLERS FALLS BALL BEARING RATCHET

#### Nickel Plated and Buffed.

Cocobolo Head and Handle, Lion Ball Bearing Chuck, Jaws have Parallel Milled Grooves which Grip Along Their Entire Length, Holds Bit Shanks, Round Shanks from 1/8 to 1/2



in., and No. 1 Morse Taper Shanks, Concealed Ratchet, Ball Bearing Head, Full Steel Clad, Ball Bearing Handle and Metal Inserted Rings.

Nos	773	772	771	770	769
Sweep, Inches	8	1.0	12	14	16
Weight Each, Lbs	3	3 36	3 14	4	4 1/4
Each	\$6.00	6.05	6.30	6.45	6.80
	wo in a	Box		12700 EU	

#### HOLDALL RATCHET, BALL BEARING Nickel Plated, with Master Chuck



Steel Sweep, Ball
Bearing Cocobolo
Head, Non-Splitting
Free Acting Cocobolo
Handle with Inserted
Steel Rings, with Master Chuck Holding 1/2
to 1/2 inch Round
Shanks, No. 1 Morse
Taper, Bit Stock and
Expan.jon Bit Shanks

Nos.	733	732	731	730
Sweep, Inches	8	10	12	14
Weight Each, Lbs	2 34	3 1/6	3 1/4	3 1/2
Each	85.10	5.15	5.40	5.50

The Feature of this Master Chuck is, that the jaws adjust themselves to fit any style of bit shank of any taper.

Two in a Box.

#### BARBERS IMPROVED RATCHET, BALL BEARING Nickel Plated

Steel Sweep, Ball Bearing Cocobolo Head, NonSplitting Cocobolo Handle with Inserted Steel
Rings, Covered Ratchet
Teeth with Exposed
Ratchet Dogs, Forged
Steel Alligator Jaws



Steel Alligator Jaws.					
Nos	34	33	32	31	30
Sweep, Inches	6	8	1.0	12	14
Weight Each, Lbs	2 1/4	2 1/9	2.7%	3	3 %
Each	\$4.65	4.65		4.95	5.10
	o in a E	lox.			

#### BIT BRACES

#### PEXTO BOX RING RATCHET, BALL BEARING

#### Full Nickel Plated

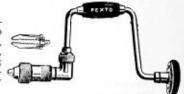
Steel Sweep, Ball Bearing Steel Clad Cocobolo Head, Cocobolo Handle, Box Ring Ratchet, Extra Knurled Steel Chuck with Machine Cut Thread. One Piece Self-Centering Forged Steel Jaws

Nos	7008	7010	7012	7014
Sweep, Inches	8	10	12	14
Weight Each, Lbs	2 %	3 1/4	35/12	3740
Each	\$5.80	5.95	6.10	6.25
Two in a	Box.			

#### SAMSON CONCEALED RING RATCHET, BALL BEARING

#### Full Nickel Plated

Steel Sweep, Ball Bearing Steel Clad Cocobolo Head, Cocobolo Handle, Concealed Ring Ratchet, Sampson Ball Bearing Chuck, Improved Sampson Jaws Hold Any Shank 1/8 to 1/2 inch.



Nos	8008	8010	8012	8014
Sweep, Inches	8	10	12	14
Weight Each, Lbs	3 1/4	3 1/2	3 %	4
Each	\$6.50	6.75	7.00	7.50
Two in a	Box.			

#### STANLEY CONCEALED RATCHET, BALL BEARING



#### No. 921—Heavily Nickel Plated

Steel Sweep, Ball Bearing Cocobolo Head, Cocobolo Handle, Concealed Ratchet, Machined Chuck, Drop Forged Steel Alligator Jaws

	Inches		10	12	14			
Weight	Each, Lbs	2 3/4	3 1/8	3 1/4	3 1/2			
Each .		\$5.15	5.25	5.40	5.70			
	Two in a	Box.						

#### VICTOR OPEN RATCHET

#### No. 945-Nickel Plated

Steel Sweep, Hardwood Head and Handle, Open Ratchet, Machined Chuck, Drop Forged Steel Alligator Jaws.



Sweep, Weight	Inches	I he			ì				8	10	12
Ti cignic	mach,	Line.	1 1		-			100	2 1/4	2 1/2	2 34
Each .		****							\$2.95	3.00	3.05
				2	12	-	4.		Dox		



Sweep, Weight Each	Each,	Lbs	 		١.				9	8 1/8 . 10	10 2 % 2 . 15	12 2 % 2 .20
									ox.			

#### BIT BRACES

#### MILLERS FALLS IMPROVED RATCHET, BALL BEARING

# in H w

#### Nickel Plated

Steel Sweep, Ball Bearing Stained Hardwood Head, Stained Hardwood Handle with Inserted Brass Rings, Open Ratchet, Forged Steel Alligator Jaws,

Nos	323	322	321
Sweep, Inches	8	10	12
Weight Each, Lbs	2 %	2.34	2 76
Each	\$3.85	3.90	4.05
Six in	a Box.		

#### MILLERS FALLS OPEN RATCHET

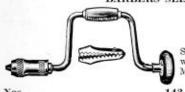
#### Nickel Plated.

Stained Hardwood Head and Handle, Barber Chuck, Alligator Jaws, Open Ratchet, Inserted Metal Ring in Handle, Plain Bearing.



Nos	1663	1662
Sweep, Inches	8	10
Weight Each, Lbs	2	2 1/4
Each	\$2.05	2.10
Six in a Box		

#### BARBERS SLEEVE



#### Steel Sweep and Jaw Socket, Stained Hardwood Head and Handle, Malleable Alligator Jaws.

Polished.

Nos	143	142	141
Sweep, Inches	8	10	12
Weight Per Dozen, Lbs	15 1/2	21	23
Each	\$1.65	1.70	1.75
Six in	a Box.		

#### CORNER BRACES

#### STANLEY

#### No. 992 Nickel Plated

Metal Clad Head, Cocobolo Head and Handle, Machined and Hardened Forged Steel Jaws.

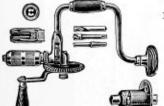
Sweep, In. 8 10 Wt., Lbs.. 3 % 4 Each .... 87.35 8.10

Two in a Box.



#### DRILL BRACES

#### MILLERS FALLS RATCHET BALL BEARING



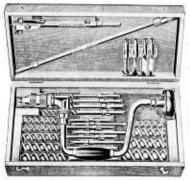
Polished and Nickel Plated Each No. 182—10 in. Steel Sweep, Ball Bearing

o. 182—10 in. Steel
Sweep, Ball Bearing
Cocobolo Head, Cocobolo Handle, Gear
Ratio 3 to 1, Master
Chuck, Forged Steel
Jaws Holding 1/8 to 1/2
in. Diameter Round
Shanks, No. 1 Morse
Taper, Bit Stock and
Expansive Bit Shanks,
Wt. Each 1/4 Lbs. 88.35

The drill attachment can be removed or affixed in a moment's time. One in a Box.

#### BIT AND BRACE SETS

#### RUSSELL JENNINGS COMBINATION "PRECISION"



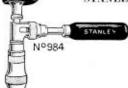
Sets are Contained in Neat Basswood Boxes with Clips and Fittings to secure the Tools in Place.

All Tools have "Precision" Shank, and the Bit Brace is Fitted with "Precision" Chuck,

Per Set

#### RATCHET CORNER BRACES

#### STANLEY BALL BEARING



Designed particularly for mechanics who have occasion to work close up into corners or in other inaccessible places where there is no room for an ordinary corner brace.

Each

## ANGULAR BORERS



With Master Chuck

To be used with a Bit Brace or Breast Drill either as an Extension or Angular Borer, Boring Angle Adjustable from 180° to 125°, Main Body Japanned, Chuck and Other Parts Pollshed. Chuck Capacity 1/2 to 1/2 S. S. Drills, Bit Stock and No. 1 Morse Taper.

#### SILL BORERS

#### MILLERS FALLS, BALL BEARING

#### With Adjustable Handle



For use in connection with a bit brace or breast drill in boring at right angles in cramped places and indispensable for car builders, electricians, carpenters, and other wood workers.

One in a Box.

#### AUGER HANDLES MILLERS FALLS ADJUSTABLE





Hardwood Handle, Black Japanned Frame

Ash Handles, Malleable Castings, a Light and Strong Handle with a Single Set Screw for convenience, holds all ordinary Bit and Auger sizes.

Each No. 3—16 in. Long, Weight Each 1½ Lbs......\$0.90

Three in a Box.
MILLERS FALLS RATCHET



#### With Detachable Handle

Nickel Plated Metal Parts, Ashwood Handles, One Handle Detachable, Ratchet works either to Right or Left or may be Locked, may be used as a Ratchet Drill.

No. 4 — 15 in. Long, Wt. Each 2 % Lbs. \$4.30 One in a Box.

## BIT EXTENSIONS



No. 1—Follows Bits % in. Diameter and Larger Bit Socket and Shank One Piece of Steel, Nickel Plated. Bit will not Work Loose.



No. 3—Follows Bits % in. Diameter and Larger Bit Socket and Shank One Piece of Steel, Nickel Plated, Bit will not Work Loose.

 Length, Inches
 12
 18
 24

 Weight Each, Oz
 7
 10 ½
 14

 Each
 \$2.15
 2.25
 2.40

 Six in a Box.

MAYHEW



No. BX1—Follows Bits % in. Diameter and Larger Forged Steel Jaws, Hardened and Tempered, Self-centering, Polished, Knurled Sleeve.

 Ing., Folished, Knurled Sleeve.
 12
 18
 24

 Length, Inches.
 12
 18
 11
 15

 Weight Each, Oz.
 8
 11
 15

 Each
 81.75
 1.85
 2.00

 Three in a Box.

YANKEE



 No. 2150—Follows Bits ½ in. Diameter and Larger

 Bits will Not Loosen or Come Out while in use.

 "Yankee" Pattern prevents bit from jamming in socket.

 Length, Inches
 15
 18
 21
 24

 Weight Each, Oz
 8
 11
 13
 15

 Each
 \$2.00
 2.25
 2.50
 2.75

 One in a Box.

#### ELECTRICIANS BORING MACHINES

HYKON



#### With Ratchet and Spring Recoil

A High-speed Boring Device operated by easy direct pull and Spring Recoil action. Eliminates need of scaffolding or step ladder, bores holes on dead levels, five times as fast as a brace and bit. Twice as fast as chain machine and easier to operate, simply pull the strap and the spring carries it back, a most natural motion.

Has self-centering chuck taking standard square Shank Bit.

#### HYKON "OLD HOUSE" WIRING ATTACHMENT For Use with Hykon Electricians' Boring Machine

Bores holes easily and quickly in a straight line and on a dead level, saves time in boring and pulling wires. It has two round steel rods which afford an accurate guide to position of hole. It has comfortable handle grips and operating position for man doing the boring. Easily and quickly attached to the boring machine.

#### HYKON SAW ATTACHMENT

For Use with Hykon Electricians' Boring Machine

Used for Notching Joists for Conduit Wiring.

#### HYKON UNIVERSAL BORING ATTACHMENT

For Use with Hykon Electricians' Boring Machine

For boring in out of way places when a brace and bit is awkward.

For boring for switches under window seat, behind furnace pipes or for installing radio,

It is fastened to boring device in a couple of minutes. Has comfortable hand hold.

Has comfortable hand hold.

#### RED DEVIL

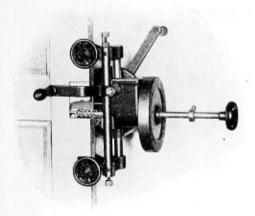
#### With Chain Drive

For Beams and Joists overhead or beneath the floor. Bores holes in perfect alignment. Nothing to get out of order. Adjusting rod housed to hollow frame. Equipped with Cross Tee Rest, adjustable to any height. Red Enameled Finish.



#### LOCK MORTISERS

ALTA HAND



#### Cuts An Ordinary Mortise in Five Minutes

A hand-driven machine with gear reduction and fly wheel to give ample power with very little effort on part of the operator.

It is equipped with self-centering jaws with wood faces.

This machine cuts up and down the entire face, not a series of holes.

Cuts entire mortise, including face-plate, without being taken from the door.

Substantially built to give long satisfactory service for the contractor who feels his work does not justify purchase of the motordriven machine.

Every machine is guaranteed to do the work as represented and warranted against defective materials for one year.

No. 1A-With 2 Cutters, Weight Each 31 Lbs....

Each .... 875.00

Note-Cutters % to 11/4 inches, by 16ths inches are carried in stock for the above Machine. State Sizes desired when ordering,

#### ALTA ELECTRIC

#### Cuts An Ordinary Mortise in Less Than a Minute.

Aluminum Frame, Light in Weight and Rust-Proof, 110 Volt Universal Motor operated from any light socket.

The cutter shaft is mounted on ball bearings.

It is equipped with self-centering jaws with wood faces.

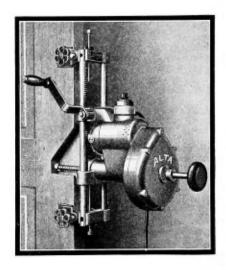
Cuts up and down the entire face—not a series of holes. It cuts the entire mortise, including face plate, without being taken from the door.

They are simple, durable and accurate.

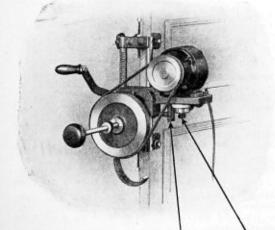
Every machine is guaranteed to do the work as represented and warranted against defective materials for one year.

Note—Cutters % to 1¼ inches by 16ths inches, are carried in stock for the above machine, state Sizes desired when ordering.

These Mortisers are built to stand severe service, that is why they are considered good tools.



#### ALTA COMBINATION



#### Motor or Hand Driven.

A light weight, portable, one-man machine, can be carried as easily as an electric drill. Sturdy and compact in design, with few working parts. Consider the convenience of this little electric tool that can be carried in one hand from door to door and from floor to floor.

It is quickly converted from Motor Drive to Hand Drive by removing belt guard, slipping belt off fly-wheel and removing screw (S) and four motor plate screws. Motor remains bolted to motor plate. This machine will cut the entire mortise, including face-plate, wihout being taken off the door. The machine is self-centering on the door. It will cut a % inch mortise in a 1 inch door without splitting the sides. Equipped with Adjustable Stop, Hardened Machine Cut Gears, enclosed and running in oil, Belt Guard, Ply Wheel and Rest Guard, Adjustable Collar which controls depth of mortise and 10 ft. Cord with Attachment Plug.

It is also furnished with Attachment for Hand Drive.

Each

No. AC—With 2 Cutters, Complete with ½ H. P. Motor, Weight 45 Lbs......\$125.00

Note—Cutters 5k to 1 1/4 inches by 16ths inches are carried in stock for the above machine, state Sizes desired when ordering.

#### AUGER BITS IRWIN MAINBOR



No. 62T-For General Work

With Solid Center, Forged from Special Analysis Steel, Tempered, Polished Twist and Shank, Unpolished Square, Double Cutter, Double Extension Lip, Single Twist. Inches, 16ths ..... 32 4 Length Twist, Inches ... 4 1/8 4 1/8 Length Over All, Inches 7 34 7 1/2 7 % 7% 7 7% Weight Per Dozen, Lbs. 2 1 1/6 Per Dozen ..... \$4.50 4.50 4.00 4.00 4.60 12 8 Inches, 16ths ...... 9 10 11 Length Twist, Inches ... 4 1/4 4 % 4.5% 8 1/2 Length Over All, Inches 8 3/8 8 1/8 8 1/4 2 34 2 1/2 Weight Per Dozen, Lbs. 3 3 4 7.00 7.00 5.506.00 Inches, 16ths ...... 13 14 15 16 Length Twist, Inches..... 4 34 4 7% 4 % Length Over All, Inches..... 8 34 8 7/8 9 8 5% Weight Per Dozen, Lbs..... 4 4 34 5 6 Per Dozen ..... 88.00 9.00 9.00 8.00 Inches, 16ths ..... 20 99 24 Length Twist, Inches..... 5 5 14 5 1/2 4.15 Length Over All, Inches..... 9 16 9 14 9 % 9 1/2 Weight Per Dozen, Lbs..... 6 9 13.50 15.00 26 30 32 28 5 1/2 5 34 5 34 6 Length Over All, Inches..... 9 1/2 10 10 1/2 11 Weight Per Dozen, Lbs..... 10 ....\$17.00 19.00 21.00 23.00 3 to 16/16, One-half Dozen; Larger Sizes, One-quarter Dozen in a Box.

#### RUSSELL JENNINGS

No. 100-Extension Lip.

Forged Crucible Tool Steel, Oil Tempered, Polished Twist and Stem, Natural Finish Shank, Double Spur and Extension Lip, Double Thread on Screw. Average Length 9 in.

1	1 1/8	1 3%	1 1/2	1 7%
2 1/8	2 1/2	2.7/8	3 1/8	3 1/2
	4	4 1/2	4 3/4	5 1/4
	5 1/2	6	6 1/2	7
n; Lar	8 <b>\$21.00</b> ger Size	$\frac{9}{24.00}$	$\begin{array}{c} 10 \\ 27.00 \end{array}$	$\begin{array}{c} 11 \\ 30.00 \end{array}$
	1 86.00 8 2½ 85.00	1 1 ½ 86.00 5.00 8 9 2 ½ 2 ½ 85.00 6.00	1 1½ 1¾ 1% 86.00 5.00 5.00 8 9 10 2½ 2½ 2½ 85.00 6.00 6.00 6.00 13 14 4½ 25 88.25 8.25 18 20 5½ 6 \$12.00 14.00 26 28 \$9 \$21.00 24.00 n; Larger Sizes, One	2 1/8 2 1/2 2 7/8 3 1/8 85 00 6 00 6 00 7 00 13 14 15 14 15 15 14 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16

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No. 72—Hand Made

8 % in.	, Caretu	ny Tes	ted, Av	erage	Length
Inches, 16ths				7	8
Weight Dozen, Lb Per Dozen					
Inches, 16ths Weight Dozen, Lbs Per Dozen		2 1/4	2 1/2	2 3/4	3
Inches, 16ths		3 ¼ \$18.72	$\frac{334}{20.16}$	4 1/4	4 1/2

## AUGER BITS

## -0000000

No. 200-Double Cutter

High Grade Soli	d Cast	Steel, F	all Poli	shed.	
Inches, 16ths Length Over All, Inches Weight Per Dozen, Lbs. Per Dozen	7 ½ ¾	4 7 % 1 5 . 00	5 7¾ 1¼ 5.00	6 7	7 8 1¾ 5.00
Inches, 16ths Length Over All, Inches Weight Per Dozen, Lbs. Per Dozen	8 1/8	9 8 1/4 2 1/4 6 . 00	10 8 3/6 2 1/2 6 . 00	11 8 ½ 2 ¾ 7 . 00	12 8 % 3 7.00
Inches, 16ths Length Over All, Inches Weight Per Dozen, Lbs. Per Dozen		8 % 3 %	14 8 % 3 % 8.25	15 9 4¾ 9.50	16 9 4½ 9.50

One-half Dozen in a Box.

#### MEPHISTO



No. 9-For Fast Boring

Special Forged Steel, Carefully Hardened and Tempered, Coarse U Thread, will Bore through any Wood, Hard or Soft, or against the Grain without Pressure. Average Length 9 in.

Inches, 16ths	10	11	12
Weight Per Dozen, Lbs	8 1/2	8 34	9
Per Dozen	\$16.80	18.00	19.20

This bit is particularly adapted for Electricians' use. It can be used in Metal Ceilings without injuring the bit. Recommended for Electricians' Boring Machines.

One-half Dozen in a Box,

#### WATROUS SHIP



No. 16-For Car and Ship Work

Forged Steel, Polis	hed,	Average	Lengt	h 9 in.	
Inches, 16ths	1 1/2	1 34	6 2 6.00	7 2 1/4 6 . 00	8 2 ½ 6 . 00
Inches, 16ths		3	$\frac{10}{3\frac{1}{2}}$ 7.50	11 4 9.00	12 5 9.00
Inches, 16ths		5 ¼ 810 · 50	$\frac{5\frac{1}{2}}{10.50}$	12.00	
4 to 20, One Dozen; Large	r Size	es, One-	half Do	zen in	a Box.

#### FORSTNER



Specially Adapted for Hardwood Working

Guided by its Circular Rim, instead of its Center. Will bore any arc of a circle. For core box patterns, veneers, scrolls, etc.

Inches, 16ths Length, Inches Each	6 1/4		6 1/4	6 1/4	8 6¾ 1.05	6 34	
Inches, 16ths Length, Inches Each	6.7%	7 14	7.14	7.14	7.14	7.34	17 7 % 1.80
Inches, 16ths Length, Inches Each	18 7 %	19 7 %	20 8 %	21	22	23	24

Note—These Bits can also be furnished with  $\frac{1}{2}$  in. Round Shanks for use in Boring Machines, when so ordered.

#### AUGER BIT SETS

IRWIN BORCHEST



Hardwood, Oil Finished Chest, Dovetailed Corners, Brass Hinges and Catches, Grooved Tills.

Irwin Solid Center
Bits Forged throughout
from One Solid Piece of
Badenger Formula
Steel, Double Cutter,
Extension Lip, Highly
Polished Twist and
Shank

Per Set
No. DM—32 ½ Quarters. 13 Bits. 1
Each 4, 5, 6, 7, 8.
9, 10, 11, 12, 13,
14, 15 and 1616ths, Weight Per
Set 4½ Lbs..\$10.30

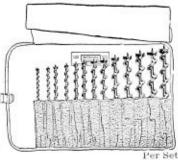
Per Se

#### IRWIN BORKIT

Flannel Lined, Slate Colored Duck Roll Braid Bound, Web Strap, Nickel Plated Buckle, Flannel Lined Flat, Separate Pocket for Each Bit.

Contains No. 62T Genuine Irwin Auger Bits. Per Set

No. DR—32 ½ Quarters, 13 Bits, 1
Each 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16/
16ths in. Weight Per Set 4 Lbs.. \$9.80



No. AR—20 ½ Quarters, 9 Bits, 1 Each 4, 5, 6, 7, 8, 10, 12, 14 and 16/16ths in. Auger Bits and 1 Screw Driver Bit, Weight Per Set 3 ¼ Lbs. . . . \$7.30

No. BBR—14 Quarters, 6 Bits, 1 Each 4, 6, 8, 10, 12 and 16/16ths in., Weight Per Set 3 Lbs.... 4.80

#### RUSSELL JENNINGS



In Fancy Varnished Hardwood Boxes with Brass Hinges and Catches.

The Box Contains
Three Sections. The
Upper Section Consains
6 Bits, the Middle Section 4 Bits, and the
Lower 3 Bits.

Cut Showing Box with Lid Open.

#### Standard Double Threaded Screw Point, Extension Lip, Polished

The Standard Bit for use with Hand Brace; bores easily and cuts a smooth hole; recommended for general use, especially appreciated by Cabinet Makers. Per Set No. 2RJ Set—32 ½ Quarters, 13 Bits, 1 Each 4, 5, 6,

#### AUGER BIT SETS

SWAN HANDY



#### For Household Use

Polished Cast Steel Bits, Varnished Wood Box, with Slide Cover.

Per Set

No. B11—14 Quarters, 6 Bits, 1 Each 4, 6, 8, 10, 12 and 16/16ths in., Weight Per Set 2 Lbs....83.00

#### AUGER BIT ROLLS

Heavy Canvas, with Canton Flannel Lining

With Flap and Pocket for Holding Bits Separately. With Strap and Buckle.



#### EXPANSIVE BITS

CLARK PATENT

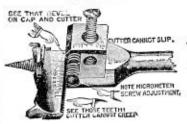


Cast Steel, Polished, Tool Steel Cutters
Per Dozen

#### EXTRA CUTTERS FOR CLARK EXPANSIVE BITS For No. 1 Large Bit

Nos	3C	4C	5C	6C
Boring, Inches	% to 1 %	1% to 3	3 to 4	4 to 5
Per Dozen		6.00	9.00	12.00
Fo	r No. 2 S	mall Bit		
Nos		. 1C		21C
Boring, Inches		. ½ to %		% to 1 ½
Per Dozen		. \$3.00		3.75

## One-half Dozen in a Box. J. E. JENNINGS ARROW HEAD



#### Micrometer Screw Adjustment

Cast Steel, Polished, Tool Steel Cutters.

No. 1A—Large, 9 ½
in. Long, with 2
Cutters, One Boring ½ to 1 ¾ in.,
the Other 1 ¾ to 3
in., Weight Dozen
8 Lbs. . . . . \$33.00

2

#### CUTTERS FOR ARROWHEAD EXPANSIVE BITS

For No.	IA-Large	Dit	
Nos	% to 1 %	4A 1 % to 3 6.00	5A 3 to 4 12.00

For No. 2A—Small Bit	
Nos	2A 1 % to
Per Dozen	5.00

One-half Dozen in a Box.

#### CAR BITS

SNELL

#### -500000000000000

No. 206-Extra Quality.

Forged Crucible Steel, Full Polished 12 in. Twist, 18 in. Long Over All.

2 1/4	2.34	3 1/8	3.5%
\$11.25	11.25	11.25	11.25
8	9	10	11
4 %	- 5	5 %	5 1/8
\$11.25	12.50	13.75	15.00
6 %	7.36	8 %	9
\$16.25	17.50	19.00	20.50
16	17	18	20
9.56	9 34	10%	1236
\$22.00	24.00	26.00	30.00
	2 1/4 \$111.25 8 4 3/6 \$111.25 12 6 3/4 \$16.25 16 9 5/6	2 ¼ 2 ¾ 11.25 8 9 4 % 5 11.25 12.50 12 13 6 ¾ 7 % 16.25 17.50 16 17 9 % 9 ¾	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

One-half Dozen in a Box.

#### IRWIN CARBOR

## 1444444444-

No. 55T-For Heavy Work

Forged from Special Analysis Steel, Tempered, Polished Twist and Shank, Single Cutter, One Side Lip, Solid Center, Solid Twist.

#### 12 in. Twist, 18 in. Long Over All

Inches, 16ths	4	5	6	7	8	9
Wt. Dozen, Lbs.	3	3	4	4	5	6
Per Dozen	\$9.00	9.00	9.00	10.00	11.25	12.50
Inches, 16ths	10	11	12	13	14	15
Wt. Dozen, Lbs.	7	7	8	9	10	10
Per Dozen	\$13.75	15.00	16.25	17.50	19.00	20.50
Inches, 16ths		16	17	18	19	20
Wt. Dozen, Lbs.		11	12	13	13	14
Per Dozen		\$22.00	24.00			30.00

One-half Dozen in a Box.

#### SHIP AUGER CAR BITS

FORD



No. 922-Single Cutter, with Screw

For Extra Deep Boring through Wood with Strong Grain or Rough Timber, Forged from Highest Grade Tool Steel, Tempered, Polished Twist and Shank, Brace Shank.

#### 12 in, Twist, 18 in. Long Over All

Inches, 16ths	6	7	8	9	10
Wt. Dozen, Lbs	4	4 1/2	5 1/2	6 16	7.16
Per Dozen	\$11.00	11.00	11.00	11.00	11.00
Inches, 16ths		11	12	13	14
Wt. Dozen, Lbs		9	1.0	10 1/2	13
Per Dozen		812.00	12.00	13.00	13.00
Inches, 16ths					
Wt. Dozen, Lbs		14 %	15 %	16 1/2	1746
Per Dozen		\$14.50	14.50	16.00	16.00
One-ha	lf Doze	n in a	Box.		

#### SHIP AUGERS

WATROUS

## - Constitution -

No. 15-With Screw.

Exta Cast Steel	, Polis	shed, Si	ngle T	wist.	
Inches, 16ths	6	7	8	9	10
Length of Twist, In	10	10	10	12	12
Length Over All, In			14	18	18
Wt. Dozen, Lbs	4	4 1/2	5 1/2	6 1/2	7 1/2
Per Dozen 8	11.00	11.00	11.00	11.00	11.00
Inches, 16ths	11	12	13	14	15
Length of Twist, In		12	12	12	12
Length Over All, In	18	18	18	18	18
Wt. Dozen, Lbs	9	10	10 1/2	13	14 1/2
Per Dozen	12.00	12.00	13.00	13.00	14.50
Inches, 16ths	16	17	18	19	20
Length of Twist, In	12	15	15	15	15
Length Over All, In	18	20	20	20	20
Wt. Dozen, Lbs	15 1/2	20	22	2.3	24
Per Dozen 8	14.50	16.00	16.00	18.00	18.00
Inches, 16ths		21	22	23	24
Length of Twist, In		15	15	15	15
Length Over All, In		20	20	20	20
Wt. Dozen, Lbs		29	32	37	39
Per Dozen		\$20.00	20.00	23.00	23.00
Inches, 16ths		25	26	27	28
Length of Twist, In		15	15	15	15
Length Over All, In		20	20	20	20
Wt. Dozen, Lbs		3.9	39	44	44
Per Dozen		\$27.00	27.00	32.00	32.00
Inches, 16ths		29	30	31	32
Length of Twist, In		15	15	15	15
Length Over All, In			20	20	20
Wt. Dezen, Lbs		48	48	54	54
Per Dozen		\$38.00	38.00	45.00	45.00
4 to 16/16ths, One-half	Dozen	; Large	r Sizes	, One-o	uarter

# Dozen in a Box.

No. 14-Without Screw

No. 14-W1		our ser	CW		
Inches, 16ths 8		9	10	11	12
Length of Twist, In 10		12	12	12	12
Length Over All, In., 14			18	18	18
Wt. Dozen, Lbs 5 1/2		6 1/2	7 1/2	9	10
Per Dozen \$13.2			13.20	14.40	14.40
Inches, 16ths		13	14	15	16
Length of Twist, In		12	12	12	12
Length Over All, In		18	18	18	18
Wt. Dozen, Lbs					15 1/2
Per Dozen					
Inches, 16ths		17	18	19	20
Length of Twist, In		15	15	15	15
Length Over All, In		2.0	2.0	20	20
Wt. Dozen, Lbs		20	22	23	24
Per Dozen		\$19.20	19.20	21.60	21.60
Inches, 16ths		21	22	23	24
Length of Twist, In		15	15	15	15
Length Over All, In		20	20	20	20
Wt. Dozen, Lbs					39
Per Dozen					27.60
8 to 16/16ths, One-half Dozen	1;	17 to 2	4/16th	s. One-c	uarter

o 16/16ths, One-half Dozen; 17 to 24/16ths, One-quarter Dozen in a Box.

#### ELECTRICIANS BITS

## IRWIN "SPEEDBOR"

No. 3E—Bores Through 1 in. Wood in 10 Turns Solid Center, Forged from One Solid Piece of Steel, Tempered, Polished Bit and Shank, Single Cutter.

		20	
Inches, 16ths	10	11	12
Length of Twist, Inches	6	6	6
Full Length, Inches		10	10
Weight Dozen, Lbs		3 34	3 34
Per Dozen	814.00	14.00	14.00

One-half Dozen in a Box.

# CARPENTERS NUT AUGERS

SNELL



#### No. 240-With Brass Nut

Best Quality Crucible Steel, Length of Twist 7 to 8 in., 2 in. and Smaller Full Polished.

Size, Inches Length Over All, In Weight Dozen, Lbs Per Dozen	4 %	5 %	7	8 %	9 1/2
Size, Inches Length Over All, In Weight Dozen, Lbs Per Dozen	18 10 ½	18 11%	18 13	18 15 ½	$\frac{19}{17\frac{1}{2}}$
Size, Inches Length Over All, In Weight Dozen, Lbs Per Dozen	19 20	27 1/2	$\frac{20}{30 \frac{1}{2}}$	20 35	20 40
Size, Inches Length Over All, In Weight Dozen, Lbs Per Dozen	20		20 48	20 52	20 54 %

½ to 2 in., One-half Dozen in a Box; Larger Sizes One-twelfth Dozen in a Package.

# BORING MACHINE AUGERS

SNELL



No. 243-For Hand Boring Machines

Best Quality Crucible Steel, Length of Twist 7 to 8 in., 12 in. Long Over All, Polished.

12 In. Long Over Am, Policieu.			
Size, Inches         ½           Weight Per Dozen, Lbs.         5 ¾           Per Dozen         \$10.00		34 7 11.00	7 1/4 13.00
Size, Inches         1           Weight Per Dozen, Lbs         7½           Per Dozen         \$15.00	8 1/2	$     \begin{array}{c}       1\frac{14}{9} \\       9\frac{34}{4} \\       19.00    \end{array} $	
Size, Inches	11	$1\frac{34}{13\frac{1}{2}}$ $28.00$	$\begin{array}{c} {\bf 2} \\ 15 \frac{1}{2} \\ {\bf 32}, {\bf 00} \end{array}$

½ to ¾ in., One-half Dozen; ¾ to 2 in., One-quarter Dozen in a Box.

# MACHINE BITS IRWIN CHUCKBOR



#### No. 62R-With 6 in. Twist

Hammer--forged from special analysis steel, refined and improved during the Irwin Process. They are tempered and drawn especially for service in power machines.

Shanks 16 in diameter, 2 in, long.

Size, Inches	4 /h 1/2 1 3/4	38 2	2 1/4 9 . 90	2 ½ 2 ½ 10 . 80
Size, Inches	18 3	5/8 3 ½	18 4	$^{rac{34}{4}}_{4rac{16}{2}}$
Size, Inches	5	76 5 ½ 18.00	6	$^{1}_{6\frac{1}{2}}$ $^{20\cdot40}$

These bits are used in the chucks of power machines. They have a screw with threads pitched to feed the bit into the wood at a speed suitable for general work; two spurs of length in keeping with the pitch of the thread of screw; two cutters on extension lips that offer ample material for wear, and two throats made open to permit the easy flow of chips.

One-half Dozen in a Box.

# MACHINE BITS

MORSE



No. 355-Straight Shank

High Grade Steel, Polished, for Hard or Soft Wood. Size, Inches . . Length Over All, In . . . 3 3 1/4 3 1/2 3 1/4 Length Twist, Inches. 113 2 4 2 4 2 4 2 4 2 4 2 4 3 6 Each ..... \$0.40 .45 .50 .55 .60 .65 . 70 Size, Inches . . 1/2 5 1/2 6 3 % 3 % % 410 4.3 4 1/2 Each . . . . . . . . . . . . . . \$0.75 .85 .80 .90 1.00 1.10 Size, Inches . . 16 Length Over All, In. . 6 1/8 6 % 6 14 6 1/2 6 % Size, Inches . . . Length Over All, In .. 71/4 7 1/2 7 34 8 14 8 1/2 Size, Inches . . Length Over All, In. . 8 % Length Twist, Inches. 6 % 9 1/4 9 9 1/2 111/4 111/4 612 7 % 8 1/2 Each ...... \$2.70 2.90 3.00 3.25 3.75 4.25 Size, Inches...... 136 Length Over All, In. 12 134 1.4 1 % 1.1% 12 1/2 12 1/2 12 1/2 12 1/2 12 1/2 9 % 9 9 3% 9 % 9 3% 9 % Length Twist, Inches. 

# WOOD BORING DRILLS

MORSE



#### No. 392-Bit Brace Shank

Designed for Wood Boring, Sizes in 32nds of an Inch. 2 3 Size ..... 5 Length, Inches..... 3 1/9 5 12 4 4 % 5 % Per Dozen ..... 83.25 3.25 3.25 4.00 3.50 Length, Inches..... 6 1/4 6.2 7 1/2 Per Dozen ...... \$4.50 5.00 5.50 6.00 6.50 12 13 15 Length, Inches..... 8 14 9 8 1/6 Per Dozen ...... \$7.00 7.50 8.00 8.75 9.50 20 22 Length, Inches..... 9 9 3% 9 1/2 9 56

 Per Dozen
 \$10.25
 \$11.00
 \$11.75
 \$12.50
 \$14.50

 Size
 24
 26
 28
 30
 32

 Length, Inches
 9 %
 9 %
 10
 10
 10

 Per Dozen
 \$16.50
 18.50
 21.00
 24.00
 27.00

These drills cut freely and rapidly in wood and will drill straight any way of the grain without splitting.

# WOOD DRILL SETS

MORSE



For Hard or Soft Wood

# BELL HANGERS AND ELEC-



#### No. 114E—Carbon Steel

For Wood, Bit Not Injured	by Co	ntact w	ith Me	tal.
12 Inches	Long			
Size, Inches 3	1/4	26	3/8	76
Per Dozen 87.50			9.50	10.50
Size, Inches 1/2	20	5%	11	34
Per Dozen \$12.00	13.50	15.25	17.00	19.00
18 Inches	Long			
Size, Inches 5	1/4	100	36	70
Per Dozen \$10.00				
Size, Inches 1/2	2	54	17.	34
Per Dozen	16.00	17.75	19.50	21.50
24 Inches				
Size, Inches	3/4	78	36	10

11 Per Dozen ....... \$16.00 18.50 20.25 22.00 24.00 <sup>3</sup>/<sub>16</sub> to <sup>7</sup>/<sub>16</sub> in., One Dozen; ½ to ½ in., One-half Dozen; ¾ in., One-quarter Dozen in a Wooden Box.

## GIMLET BITS STANDARD PATTERN



No. 240—Hammer Forged from Best Quality Cast Steel Hardened and Drawn to a Very Fine Spring Temper the Entire Length of Bit.

Inches, 32nds	2	3	4	5	6	7
Av. Length, Inches	4 1/4	4 3%	4 1/2	5	5 14	5 1/4
Av. Wt. Dozen, Lbs	1/2	1/2	54	3/4	34	3/4
Per Dozen						
Inches, 32nds		8	9	10	11	12
Av. Length, Inches		5 1/2	5 %	5 34	6	6
Av. Wt. Dozen, Lbs		7/8	7/8	1	1 1/4	1 1/4
Per Dozen		\$2.00	2.40	2.40	3.00	3.00
One	Dozen	des o	Descri			

# DIAMOND COUNTERSUNK BITS WORMER POINT



No. 280-Solid Crucible Steel, Straw Finish

Size Nos	0	1	2	3	4
Diam. Point, Inches	5/32	6/32	7/32	8/32	9/32
Point to Countersink, In.	34	1	1 1/4	1 1/2	1 %
Dia, Countersink, In	1/2	200	5%	11	34
Weight Dozen, Oz	10	11	12	14	17
Per Dozen	\$3.30	3.30	3.30	3.30	3.30
One	Dozen in	a Box			

# CENTER BITS



Forged from Finest Tool Steel Hardened and Tempered, Bright Finish

rantacarea maa	r carrie	or comp. The	right t	misu.	
Size, Inches	4 1/2	4 1/2 1 1/2	1 %		34 4 % 2 ½ 3 . 00
Size, Inches	5 3	5 %	3 7/8	5 14 4 14	
Size, Inches	6 5 86.40	6 5 ½	5 % 8 - 40	1 76 6 9 . 20	2 6 6 ½ 10.00

# PLUMBERS BITS MEPHISTO



#### For Plumbers, Steam Fitters and Electricians

Drop Forged Steel, Hand Filed, Tempered and Polished, 51/2 in. Long, 3 in. Twist. For use in Bit Brace or Electricians Boring Machines.

Size, Inches	$1\frac{\frac{1}{2}}{1\frac{1}{2}}$ \$14.40	15.60	$2\frac{\frac{5}{2}}{16.80}$	$\frac{\frac{11}{18}}{3}$ <b>18.00</b>	$\frac{34}{3\frac{1}{2}}$ 19.20
Size, Inches Wt. Dozen, Lbs Per Dozen	\$20.40	7/8 4 1/2 21 . 60	$\frac{15}{5}$ 22.80	$\begin{smallmatrix} & 1 \\ 5 \frac{1}{2} \\ 24.00 \end{smallmatrix}$	$^{1\frac{1}{6}}_{6\frac{1}{2}}_{28.00}$
Size, Inches		8 836.00	9	10	12

# NAIL GIMLETS

Single Cut High Grade Steel, Well Finished, Hardwood Handle. Per Dozen No. 275-Assorted 1/8, 27,

A and 1/4 in., Weight Per Dozen 7 Oz... \$2.50



Double Cut

Cast Steel, Hardened, Iron Handle.

Per Dozen No. 470—Assorted 1/8, 12, 18 and 14 in., Wt. Per Dozen 17 Oz. \$1.00

Three Dozen in a Box.

# ELECTRICIANS GIMLETS

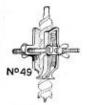


No. 85-Single Cut High Grade Steel, Hardwood Handle,

Size, Inches ..... 1/4 x18 A x18 14 x 2 4 % x24 7.00 9.00 9.00 One Dozen in a Box

# BIT GAUGES

# STANLEY ADJUSTABLE Iron, Nickel Plated



This Gauge can be attached to bits of any size up to 1 in. in diameter. Two Projections engage with the twist of the bit, so that it can be accurately set for the bit to bore at any depth required. Each No. 49-2 1/2 in. Long, Weight Each 

One in a Box.

# MILLERS FALLS BALL BEARING



Steel, Nickel Plated

Contact ball revolves on ball bearings which reduces friction to a minimum and prevents defacing the most delicate material.

No. 2-5% in. Long, Weight Each 2 Oz...... Six in a Box.

# HOLLOW AUGERS

STEARNS REVOLVING



With Adjustable Stop

Adjustable Depth Gauge and Cutter, Gun Metal Finished Disc, Japanned Barrel, Cold Rolled Steel Shank, Tool Steel Knife. Each

MILLERS FALLS



Adjustable

Malleable Iron Body, Frame Enameled Red and Black, Bright Parts Polished, Steel Knife Carefully Tempered and Sharpened, Steel Adjusting Screw, Graduated Index, Stop Gauge for Regulating the Length of Tenons.

# SPOKE TRIMMERS MILLERS FALLS



With Adjustable Stop Gauge
Black Enameled Iron Frame, Nickeled Bit Shank, Adjustable Knife, Sharpened Ready for Use.
Adjustable Stop Gauge Clamps with Thumb Screw.

No. 101—Cuts Round Stock up to 1% in. and Square Stock up to 1% in., Weight Each ½ Lbs.....\$1.00
No. 102—Cuts Round Stock up to 3 in. and Square Stock up to 2½ in., Weight Each 1½ Lbs...... 1.35
No. 101, Three; No. 102, Two in a Box.

# PLUG CUTTERS

HARGRAVE



Tempered Tool Steel, Polished

# DOWEL SHARPENERS

STANLEY



Steel, Nickel Plated

Each

No. 22—Weight Each 2 Oz......\$0.40

This is a very practical little tool for Pattern Makers, Cabinet Makers and other Wood Workers. It is used in a bit brace for pointing the ends of wood dowels so they will drive more readily.

Six in a Box.

## DOWEL PLATES



Forged Steel, Polished

Per Dozen

# DOWEL AND ROD TURNING MACHINE

STANLEY



For Pattern, Cabinet and Furniture Makers and Manual Training Schools

Cuts Dowels various sizes in any length.

Operated by hand and the crank can be adjusted for a long or short throw giving power or speed to the machine as desired.

Each

When Ordering Always State Size Wanted. One in a Box.

# DOWELING JIGS

STANLEY



For boring Dowel Holes in the edge, end or surface of work up to 3 in, in thickness, also used as a bit guide in mortising. All metal, Nickel Plated. Weight each 1½ lbs.

No. 59—Complete with 5 Guides, ¼ to ½ in.....\$2.80 No. 60—Complete with 9 Guides, ¼ to ¾ in..... 4.05

# AUTOMATIC DRILLS

#### VANKEE



#### Knurled Handle

Steel and Brass, Nickel Plated, Magazine in Handle for Holding Drill Points. Each

Has ratchet movement which can be used to advantage in hard or tough wood. The drill points are in plain sight when magazine is open.

One in aBox.



#### With Ratchet Movement

Steel and Brass Construction, Nickel Plated Magazine in Handle for Holding Drills, Each

The drill point stands still during upward movement of handle, has ratchet movement for hard or tough wood. One in a Box.



#### Adjustable Tension

Steel and Brass Construction, Nickel Plated Magazine in Handle for Holding Drills, Each No. 44-1114 in. Long, Complete with 8 Drill Points

The cap on top of drill has a screw attached to it, by revolving which the spring is made longer or shorter and as a result weaker or stronger to suit work in hand and save breakage of drill points.

One in a Box.

#### GOODELL-PRATT



#### Dull Nickel Finish

Each

This drill is made to sell at a popular price but in mechanical construction is equal to any tool of its kind, One in a Box.

#### GOODELL-PRATT MR, PUNCH



#### Magazine Handle

Each

This drill embodies all the special features required in an automatic drill. The center nut, which is the most important part of any spiral-driven tool, is made of a very hard grade of brass and will give lasting service.

One in a Box.

# AUTOMATIC DRILL POINTS

FOR YANKEE AUTOMATIC DRILLS



Illustrations Half Size.

Assorted Sizes Per Set

#### Straight Sizes

Size, In...  $\frac{1}{8}$   $\frac{1}{\sqrt{1}}$   $\frac{1}{\sqrt{2}}$   $\frac{1}{\sqrt{2}}$   $\frac{1}{\sqrt{2}}$   $\frac{1}{\sqrt{2}}$   $\frac{1}{\sqrt{2}}$   $\frac{1}{\sqrt{2}}$   $\frac{1}{\sqrt{2}}$   $\frac{1}{\sqrt{2}}$  Per Dozen. \$1.80 1.50 1.50 1.50 1.50 1.50 One Dozen in a Package.

# RECIPROCATING DRILLS

#### YANKEE



#### For Metal or Wood

Tool Steel Spiral, Ball Bearing Hardwood Handle, Nickel Plated Chuck and Driver, will hold any Drill with Shank in Diameter or Less, without Drills. Each No. 50—16 in. Long, without Drill Point, Traverse

#### GOODELL-PRATT



#### For Metal or Wood

Polished Hardwood Traveling Handle and Head, Three-Jaw Chuck, will hold up to 1/4 in. Round Shanks, without Drills.

# PUSH BRACES

#### YANKEE



#### Right and Left Hand Ratchet and Rigid

Nickel Plated Steel, Knurled Grip, Polished Hardwood Handle, Malleable Iron Chuck, Forged Steel Jaws.

Holds all the small tools used in a bit brace. Operated by pushing the handle to revolve the tools. One in a Box.

# LIGHTNING BRACES



#### For Right or Left or One Way

Each

No. 1—Length with Bit when Closed 18½ in., when Extended 29 in., Nickel Plated Cylinder, Lignumvitae Head and Handle, Complete with One Screw Driver Bit, Weight Each 1 Lb.......\$5.80

This tool is designed for screw driving and boring. They are quick in their work and can be used with great force. They are used automatically running the bit backward and foreward to drive or withdraw a screw.

Each

#### SCREW DRIVERS

## YANKEE IMPROVED SPIRAL RATCHET

The New Yankee Spiral Screw Drivers are made with Lock-Collar, Sleeve and Cylinder Keyed together making these Parts Immovable.

A new driving nut, a third longer than old type gives longer wear. Ratchet pawls, lengthened and strengthened cannot break, bend or get out of order.



#### Regular Pattern, Right or Left Hand and Rigid

Nickel Plated Parts, Polished Hardwood Handle, Complete with 3 Sizes of Bits.

piete with a Sieca of Dies.		
Nos	30A	31A
Length Extended, Inches	19 1/4	26 1/4
Length Closed, Inches	13 1/2	17 1/2
Weight Each, Lbs	1 1/8	1 34
Each	\$3.50	4.30

No. 31A Driver is of same design as No. 30A but is made considerably heavier and stronger throughout, for use in car shops, etc., where heavy screws are required to be driven or drawn.

One in a Box.

# YANKEE QUICK RETURN SPIRAL RATCHET



#### Right or Left Hand and Rigid

Nickel Plated Parts, Polished Hardwood Handle, Complete with 3 Sizes of Bits.

Nos	130A	131A
Length Extended, Inches	20 1/2	28
Length Closed, Inches	15	19 1/2
Weight Each, Lbs	1 1/8	1 %
Each	83.75	5.00

These are the regular Nos. 30A and 31A Yankee Screw Drivers with a spring added in handle as shown in cut, which causes the handle to come back for the next push, in driving screws in and out. It is a "quick return" and more rapid as well convenient in practical use, than pulling the handle back.

One in a Box.

#### VANKEE POCKET SPIRAL RATCHET



#### Light Pattern, Right or Left Hand and Rigid

No. 135—Same as No. 35, but with Spring in Handle which Causes the Handle to Come Back for the Next Push, in Driving Screws In or Out, it is a "Quick Return" and More Rapid in Practical Use than Pulling the Handle Back................................... 3.00

Intended for electrical workers, cabinet makers, carpenters and mechanics having a large number of small screws to drive. One in a Box.

#### YANKEE SPIRAL RATCHET



# For Driving Screws Only. Right Hand Only and Rigid

Nickel Plated Parts, Polished Hardwood Handle, Comlete with 3 Sizes of Bits.

piete with 5 Sizes of Dits.			
Nos	25	26	27
Length Extended, Inches	13 %	20 1/4	26 %
Length Closed, Inches	10 1/2	14 1/2	18 %
Weight Each, Lbs	94	1 16	2
Each	82.40	3.00	3.75
One in a E	lox.		

# SCREW DRIVERS MILLERS FALLS SPIRAL RATCHET



Right and Left Hand and Rigid

Steel Spiral Accurately Machined, Hardened Tool Steel Ratchet Pawls, Stained Hardwood Handle, Metal Parts Nickel Plated.

Nos	67	61	62
Length Extended, Inches	12 %	20 16	26 14
Length Closed, Inches	9.3%	1434	1714
Weight Each, Lbs	56	1 0	141
Each	82.30	3.10	4.15

The spiral locking device is of new design, positive in action and especially rigid. The several actions are plainly marked on the shifter sleeve.

One in a Box.

# MILLERS FALLS SPRING SPIRAL RATCHET



Right and Left Hand and Rigid

Steel Spiral Accurately Machined, Hardened Tool Steel Ratchet Pawls, Stained Hardwood Handle, Metal Parts Nickel Plated.

Nos	670	610	620
Length Extended, Inches	11%	18 %	24 15
Length Closed, Inches	8 1/8	125%	16%
Weight Each, Lbs	43	1 1/4	1 74
Each	\$2.75	3.50	4.75

These are similar to the Nos. 61, 62 and 67 Screw Drivers with addition of a spring in the handle to cause the handle to come back for the next push in driving screws in or out, which is more rapid and convenient than pulling the handle back.

One in a Box.

# SCREW DRIVER BITS



Best Cast Steel, Properly Tempered, Ground and Polished Per Dozen

1 Lb. \$2.75 No. 31B—¼, ¾ and ¼ in. Points, for Nos. 31A, 131A and 27 Yankee Screw Drivers, Weight Per Dozen 1¼ Lbs. 2.75

No. 35B-18, fit and 14 in. Points, for Nos. 35, 135 and 25 Yankee Screw Drivers, Weight Per Dozen

#### YANKEE, WITH SCREW HOLDER



For Use with Yankee Spiral Ratchet Screw Drivers
Per Dozen

A longer bit than regular, with holder attached to hold screw. When screw is driven in place the jaws open as the head of screw sinks into wood.

# SCREW EYE HOLDERS



For Use with Yankee Spiral Ratchet Screw Drivers
Per Dozen

No. 35E—For Nos. 35, 135 and 25 Yankee Screw Drivers 6.00

# COUNTERSINKS VANKEE



For Use with Yankee Spiral Ratchet Screw Drivers Extra Quality Steel, for Hard or Soft Wood.

Per Dozen No. 30C-For Nos. 30A, 130A and 26 Yankee Screw 

No. 31C-For Nos. 31A, 131A and 27 Yankee Screw 

No. 35C-For Nos. 35, 135 and 25 Yankee Screw One Dozen in a Box.

# WRENCH SOCKETS

VANKEE



For Use with Yankee Spiral Ratchet Screw Drivers

No. 30W-For Nos. 30A, 130A and 26 Yankee Screw Drivers, Width Across Flat inches 1/4, 1/6 1/2, 3/8, 1/6 and ½ in.

No. 31W-For Nos. 31A, 131A and 27 Yankee Screw Drivers. Width Across Flat inches 11, 36, 17, 1/2, 18 and

Per Dozen Sizes ½ to ½ Inch. \$3.50 Sizes ½ to 5% Inch. 4.00 State Size and Number of Screw Driver When Ordering.

# CHUCKS WITH DRILL POINTS

YANKEE



For Use with Yankee Spiral Ratchet Screw Drivers

Consists of 8 Drills 1/5 to 11 in., With Chuck with Shank Same as Screw Driver Bits Fitting the Screw Driver Converting it into a Drill.

Per Dozen Sets No. 30C-For Nos. 30, 130 and 26 Screw Drivers. \$12.00 No. 31C—For Nos. 31, 131 and 27 Screw Drivers. 12.00 No. 35C—With 3 Drills 16, 34 and 25 in., for Nos. 35.

135 and 25 Screw Drivers..... 6.00 One Set in a Round Wooden Box, One Dozen in a Carton.

#### MILLERS FALLS



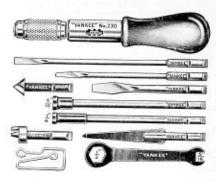
For Use in Spiral Ratchet Screw Drivers

Drills can be removed without re-moving chuck from screw driver.

No. 6100-For Use in Nos. 61 and 610 Screw Drivers, 8 Drill Points, One Each 🖧 to 🔠 in., Weight Per 

No. 6700-For Use in Nos. 67 and 670 Screw Drivers. 3 Drill Points, One Each it to it in., Weight Per Set 2 Oz...... . 45 One Set in a Box.

# RADIO TOOL SETS YANKEE



# Specially Designed for Radio Work

This is the Handiest Set of Tools ever made for radio work.

It takes care of all screws, reams and countersinks holes, runs up nuts, bends and loops wire, and is provided with a wrench for jack and fa in. hexagon or square nuts. A touch on the ratchet shifter gives right and left ratchet and rigid adjustment.

Per Set 

#### Contents of No. 105 Set

No. 230-Ratchet Screw Driver (61/4 in. Over All) Holds All Attachments.

Blades-5 1/2 x 3 in. for Long Reach into Box. Between Wires, etc.

3 ½ x ½ in., for Small Screws on Dials. 2 ½ x ¼ in., for Heavy Screws, Putting up Aerials, etc.

Countersink-For Countersinking, for Heads of Screws.

Sockets—(Two) 1/4 in. and 1/6 in. Hexagon, with 4 in. Shanks. Cover all Small Nuts,

Reamer-For Enlarging Holes in Panel from 1/8 to 1/2 in.

Wrench-One End, is in Square or Hexagon. Other, 1/2 in. Hexagon for Jacks.

Wire Bender-For Making Loops and Bending Wire.

One Set in a Box.

# SCREW DRIVERS

YANKEE MAGAZINE POCKET



#### Nickel Plated Knurled Steel Body

Polished and Nickel Plated, with Four Detachable Cast Steel Blades of Varying Widths and Thicknesses, Blades are Kept in Magazine Formed by Handle.

Each No. 60-% in. Diameter, Length when Closed 3 in., When Extended 4 1/4 in., Weight Each 2 Oz .... \$1,00

Twelve in a Box.

This small tool is the most convenient screw driver made with assorted blades.

#### SCREW DRIVERS

#### YANKEE RATCHET



#### No. 11-Right and Left Hand and Rigid

Polished Cast Steel Blade, Nickel Plated Parts, Polished Hardwood Handle.

Length Blade, Inches	2	3	4	5
Length Over All, Inches	4 7/8	7 %	8.34	9 34
Weight Per Dozen, Lbs	1 1/2	3 1/4	3 1/2	3 34
Per Dozen	\$8.50	10.30	11.00	12.20
Length Blade, Inches		6	8	10
Length Over All, Inches		11 %	13	15 %
Weight Per Dozen, Lbs		5	6	7 1/2
Per Dozen		\$13.75	15.50	18.50

Adjustment for right or left hand is made by slide moved across length of blade.

One-half Dozen in a Box.

#### LIGHT YANKEE RATCHET



#### No. 15-Right or Left Hand and Rigid

Polished, Cast Steel Blade, 1s in. Diameter, Nickel Plated Parts, Polished Hardwood Handle.

Length Blade, Inches	2	3	4	5
Length Over All, Inches	4.78	5 %	6.7%	7.36
Weight Per Dozen, Lbs.	1 1/4	1 1/2	1 %	1 34
Per Dozen	89.25	9.75	10.00	10.50

Has a knurled washer on the blade to turn the blade with the finger and thumb.

One-half Dozen in a Box.

#### YANKEE SCREW HOLDING RATCHET



#### Right or Left Hand and Rigid

Polished Cast Steel Blade, Nickel Plated Parts, Polished Hardwood Handle, with Attachment to Hold Screw, Put it in Place and Drive it in, Especially in Places Difficult to Reach.

No. 110-5 in Blade, Weight Per Dozen 4 1/8 Lbs. . \$16.50
One-half Dozen in a Box.

#### LIGHT YANKEE SCREW HOLDING RATCHET



#### Right or Left Hand and Rigid

Polished Cast Steel Blade, Nickel Plated Parts, Polished Hardwood Handle, with Attachment to Hold Screw, Put it in Place and Drive it in, Especially in Places Difficult to Reach. Per Dozen

No. 115-5 in. Blade, Weight Per Dozen 2 1/4 Lbs. . \$16.50 One-half Dozen in a Box.

#### SHORT YANKEE RATCHET



Right or Left Hand and Rigid

Metal Parts Nickel Plated, Polished Hardwood Handle.
Per Dozen

# SCREW DRIVERS

#### HURWOOD

"Hurwood" Screw Drivers are unsurpassed for strength and durability. The blade, shank and head are one piece of special steel. Two patent projecting wings under the head, together with a rivet which passes through the ferrule, handle and shank, securely fastens the blade in the handle, preventing its turning.

#### HURWOOD REGULAR



#### No. 20-With Metal Head

Tempered and Polished Steel Blade, Running Through Handle, Riveted and Headed, Countersunk Head, Black Stained Fluted Hardwood Handle, Polished Steel.

Length Blade, Inches	214	3	4	5
Length Over All, Inches	6 1/2	8	9	10 1/2
Diameter Blade, Inches	$\sqrt{a}$	20	1/4	vis.
Weight Per Dozen, Lbs	1 1/2	1 %	1 %	4 1/4
Per Dozen	\$3.60	4.20	4.80	6.00
Length Blade, Inches	6	8	10	12
Length Over All, Inches	11%	15	17	19
Diameter Blade, Inches	rår.	3%	96	3%
Weight Per Dozen, Lbs	5	8 1/2	9	10
Per Dozen	87.20	8.40	10.80	12.60
One-half Do-	zen in s	Roy		

# HURWOOD DOUBLE GRIP

# No. 20-With Metal Head

Intended for Extra Heavy Work, Same Construction as Hurwood Regular Except with Double Grip, ½ in. Diameter Blade.

Length Blade, Inches			 	J	٠.				18
Length Over All, Inches	-								2714
Weight Per Dozen, Lbs									22
Per Dozen									

One-half Dozen in a Box.

#### HURWOOD SMALL SHANK ELECTRICIANS



#### No. 55-With Insulated Head

Small Shank, Blades are Made of Small Stock, Handles are Short and of Small Diameter, Fluted and Stained Black, Blades & in. Diameter,

Length Blade, Inches 1 1/2	2 16	:3	4
Length Over All, Inches 4 1/8	6 14	6 1/2	7 1/2
Weight Per Dozen, Lbs 34	1	1 1/4	1 1/2
Per Dozen \$3.60	3.60	4.20	4.80
Length Blade, Inches	. 5	6	8
Length Over All, Inches	8 1/2	9 1/2	11 1/2
Weight Per Dozen, Lbs	. 1 1/2	1 %	1 3/4
Per Dozen	\$6.00	7.20	8.40

These screw drivers have the head countersunk in the handle and insulated by a non-conducting plug of hard material. One-half Dozen in a Box.

#### HURWOOD BABY



#### Blade, Shank and Head, Formed from One Piece of Special Steel

One-half Dozen in a Box.

### SCREW DRIVERS HURWOOD MACHINISTS



For Heavy Work

Tempered and Polished Special Steel Blade, Running Through Handle, Riveted and Headed, Countersunk Head, Black Stained Fluted Hardwood Handle, Polished Steel Ferrule, Metal Head.

Nos	51	52	53
Length Blade, Inches	1 %	3	4
Length Over All, Inches	5 1/2	7.3%	9 1/4
Width of Tip, Inches	3/8	76	1/2
Weight Dozen, Lbs	3 1/2	5 34	9
Per Dozen	\$4.80	9.00	12.00
One-half	Dogen in	a Pov	

#### HURWOOD MACHINISTS



Hexagon Shank for Use with Wrench

Blade, Shank and Head are Formed from One Piece of Special Steel, Extra Heavy Blade, Black Fluted Handle, Metal Head

5136	52 14	53 14
	2.5%	3 1/4
5 1/2	7.3%	9 34
36	70	3/2
4	7	10
\$7.80	12.00	15.00
	5 1/2	1 ½ 2 % 5 ½ 7 % 7 % 4 7 7

These screwdrivers are especially adapted for heavy work when a long driver can not be conveniently used. One-half Dozen in a Box,

#### HURWOOD DOUBLE GRIP MACHINISTS



Hexagon Shank, for Use with Wrench

Blade, Shank and Head are Formed from One Piece of Special Steel, Extra Heavy Blade, Black Fluted Handle, Metal Head. Per Dozen

No. 54—8 in. Blade, 18¼ in. Long Over All, ½ in. Diameter Blade, Weight Per Dozen 17¼ Lbs.. \$30.00

#### CHAMPION



No. 201—Strong Mallcable Bolster Polished Round Forged Tough Steel Blade, Tempered

Shank Shrunk into a Malleable Bolster, Heavy Combined Tang and Ferrule, Cherry Stained Fluted Hardwood Handle, Length Blade, Inches. 2 1/2 Weight Dozen, Lbs. . . 1 1/2 3 4 5 6 2 3 4 4 1/2 Per Dozen ...... \$4.25 5.00 5.25 5.60 6.40 Length Blade, Inches..... 7 8 10 12 Weight Dozen, Lbs..... 6.16 5 8 11 Per Dozen .... ... 87.35 8.20 10.20 12.15

# One-half Dozen in a Box. CHAMPION CABINET MAKERS



No. 203—Strong Malleable Bolster

Polished Round Forged Tough Steel Blade, Tempered Shank Shrunk into a Malleable Bolster, Heavy Combined Tang and Ferrule, Cherry Stained Fluted Hardwood Handle.

rang and retrute, Cherry Stained	rinten	nardwood	riangie.
Length Blade, Inches 21/2	3 12	4 1/2	5 36
Weight Dozen, Lbs 11/2	2	2 34	3
Per Dozen \$4.25	5.00	5.25	5.60
Length Blade, Inches	6 1/2	8 16	1016
Weight Dozen, Lbs	3 1/4	5	7
Per Dozen	86.40	8.20	10.20
One-half Dozen	in a Bo	X,	

# SCREW DRIVERS CHAMPION SPECIAL



With Short Blade

Malleable Bolster, Polished Forged Steel Blade, Heavy Combined Tang and Ferrule, Cherry Stained Fluted Hardwood Handle. Per Dozen No. 112-11/2 in, Blade, 136 in, Wide, 51/4 in, Long



No. 239-One Piece, Drop Forged Steel Seasoned Hardwood Handle, Patent Screw Rivets. Length Blade, Inches. . 2 21/2 3 4 5 % Length Over All, Inches 6 1/4 9 % 7 34 8 % 1/4 1/4 Diameter, Inches..... ń 20 Weight Dozen, Lbs.... 2 14 2 1/2 Per Dozen ..... \$3.50 3.70 4.25 5.00 12 Length Blade, Inches. . 6 7 8 10 16 % 1234 14% Length Over All, Inches 111/4 18% Diameter, Inches ..... 11 33 Weight Dozen, Lbs.... 7 % 10 1/2 1116 1214 Per Dozen ..... \$6.00 7.00 8.00 10.00 12.00 One-half Dozen in a Box.

#### TOBRIN MACHINISTS KNIFE HANDLE



No. 31-With Square Shank One Piece Drop Forged Steel, Hardwood Handle.

Length Blade, Inches.... 4 4 16 5 Length Over All, Inches. 8 1/2 10% 9 1/2 Size Shank, Inches..... 3/8 16 10 Width Point, Inches.... 34 34 Weight Dozen, Lbs..... 7 1/6 1036 5 14 \$9.00 10.00 11.00

DEFIANCE REGULAR



No. 70-Red Fluted Handle

Tempered Steel Blade, Securely Fastened in Handle, Will Not Turn.

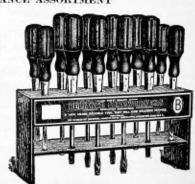
Length Blade, Inches . . 216 Length Over All, Inches 6 1/2 8 9 10 1/2 11% Diameter Blade, Inches 16 The . Weight Dozen, Lbs.... 1% 2 1/2 3 1/2 4 Per Dozen ...... \$3.00 3.00 3.60 3.60 4.20 Length Blade, Inches... 8 10 18 12 15 Length Over All, Inches 15 17 19 2714 2234 Diameter Blade, Inches 3/8 3/8 1/2 Weight Dozen, Lbs.... 9 1214 18 8 \$5.40 6.60 8.40 Per Dozen ..... 9.60 12.00

One-half Dozen in a Box. RELIANCE ASSORTMENT

#### In Metal Display Rack

Special Steel, Tempered Blades, Fluted Black Hardwood Handles, Nickel Plated Drawn Steel Ferrules.

Per Assortment
No. 35 Assortment
—Contains Four
Each 4, 5 and 6
in. Blade Screwdrivers in Enameled Steel Stand,
Attractively Enameled in 4 Colors, Wt. E a ch
4 1/6 Lbs....\$4.50



# SCREW DRIVERS

STANLEY RADIO



No. 177-Black Stained Handle with Fluted Grip

Parallel Shanks, 2 in. Diameter for following Countersunk Screws.

Length Blade, Inches ..... 8 Length Over All, Inches . . . . 9 34 11% Weight Per Dozen, Lbs..... 11 1 1 1/8 Per Dozen ...... \$3.00 4.20 4.80 6 60 One-half Dozen in a Box.



#### CRESCENT HAMR-HANDL

#### Drop Forged Steel Blade, Hardened and Oil Tempered, Nickel Plated

Answers every purpose of an ordinary screw driver when handle is straight. By turning the handle at right angles irresistable leverage is secured, easily starting the tightest screw in hard wood.

A strong spring holds the handle in place in either position.

Handle may be used as a hammer.

Each No. K26-6 in. Blade, 10 in. Over All, 1/2 in. Point, Weight Each 14 Oz ..... One in a Box.

#### STARRETT POCKET





Octagon Head Prevents Rolling

Knurled and Nickel Plated Steel Tubing Handle, Tempered Steel Blade.

No. 553A-4 in. Diameter Handle, 1% in. Long, 80.50 Blade, Weight Each 1/2 Oz ..... No. 553B-3/8 in. Diameter Handle, 3 in. Long Blade, Weight Each 14 Oz..... Extra Blades ..... .18 Six in a Box.

#### STARRETT JEWELERS



# Steel Tubing, Knurled and Nickel Plated

With Concaved Swivel Head, Prevents Rolling.

Nos.......555AA 555A 555B 555C 555D 555E Handle, Inches. . 14 1/4 14 14 14 14 .040 Dia. of Blade, In. .025 .055 .070 .080 .100 Each ...... \$0.55 .55 . 55 .55 .55 .55 No. 5558—Set of Six......Per Set, \$3.30 Extra Blades . Each, Six in a Box.

# STARRETT OPTICIANS



# With Concaved Swivel Head

Made of Steel Tubing, Nickel Plated.

For opticians, watch and clock makers. Pressing the bowed part between the thumb and fingers opens the jaws to pick up and hold small screws.

No. 552A-Complete Screw	Driver.	with	Two	Each Blades
and Screw Holder				80 . 80
No. 552B-Without Screw				
Extra Screw Holder				
Extra Blades-Either Size	n a Boy			15

# SCREW DRIVERS

STARRETT MAGAZINE POCKET



Knurled Metal Handle.

Each

No. 557-4 in. Long when Closed, with 4 Detachable Blades, 1 Each  $\frac{1}{2}$ ,  $\frac{1}{2}$ ,  $\frac{1}{2}$ ,  $\frac{1}{4}$  and  $\frac{3}{6}$  in., Weight Extra Blades ..... One in a Box.

#### STARRETT EYE GLASS



#### Steel Tubing, Knurled and Nickel Plated

This Screw Driver is made with a chuck to hold the blade firmly in a split socket when in use. To carry in the pocket, on a key ring or watch chain. The blade may be removed by a slight turn of the chuck then reversed and telescoped through the socket.

No. 554-21/2 in. Long, & in. Diameter of Handle.. \$0.35 

#### LITTLE WONDER ASSORTMENT

#### On Display Card

Tempered Steel Blade 1/4 in. Diameter, Red Varnished Wood Handles, Polished Steel Fer-Per Assortment No. 42 Assortment — Contains Four Each 14, 2 and 3 in. Blade, Screw Drivers on Card, Weight

Each ½ Lb......\$2.00



#### B-M-CO REVERSIBLE RATCHET



#### For Work in Close Quarters

Forged Steel, Nicely Finished, Tool Steel Bits. Per Dozen

No. 18-9 in. Long, Weight Per Dozen 3 1/2 Lbs....\$30.00 One in a Box.

### DOUBLE END OFF-SET



Two Different Angles, for Close Work Hand Forged Tool Steel, Natural Finish.

No. 592-6 in. Long, Weight Per Dozen 1 1/4 Lbs...\$3.00 One Dozen in a Box.

#### SCREW DRIVER BITS STANLEY



No. 26-Crucible Steel, Oil Tempered and Polished

Width Tip, Inches..... 14 3/8 Length, Inches ..... 4.1/2 4 34 Weight Per Dozen, Lbs..... 1 1 14 1 16 1 34 Per Dozen

One Dozen in a Box.

#### BUCK



High Grade Crucible Tool Steel, Polished

Per Dozen No. 72—5 in. Long, Assorted ¼ to  $\frac{1}{16}$  in. Tips, Weight Per Dozen 1½ Lbs......\$4.50

One Dozen in a Box.

# HOLLOW HANDLE TOOL SETS

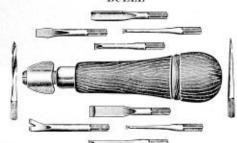




Length of Tools 4 in.

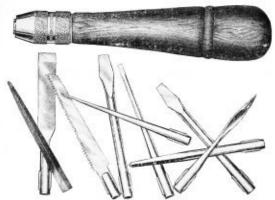
Cocobolo Handle, Highly Polished, Nickel Plated Chuck and Jaws, Ten High Grade Carefully Tempered and Honed Steel Tools.

#### BUELL



Length of Tools 2% in.

#### BRIDGEPORT UTILITY



Length of Tools 4 in.

#### AWLS HURWOOD SCRATCH



| Blade, Shank and Head Formed from One Piece | High Grade Steel, Points Tempered, Black Stained Handle, Nos. 6 7 | Length Blade, Inches 2 \(^3\)\(\_4\) 2 \(^3\)\(\_4\)\(\_2\)\(\_4\)\(\_4\)\(\_2\)\(\_4\)\(\_4\)\(\_2\)\(\_4\)\(

#### STANLEY SCRATCH



#### PEXTO SCRATCH



No. 3—Socket, Forged Steel, Polished, 5 in. Blade, Hardwood Handle, Weight Per Dozen 2 Lbs....\$4.00 One Dozen in a Box.

#### HURWOOD BRAD



Blade, Shank and Head Formed from One Piece High Grade Steel, Points Tempered, Black Stained Handle. Per Dozen

#### MAYHEW BRAD



Flat Forged Tool Steel Blades
Carefully Tempered, Mahogany Finish, Hardwood Handle, Nickel Plated Ferrule;
Per Dozen
No. 1050—Blades 1½ in, Long, Assorted Flat Points,

2/10 to 5/21 in., Weight Per Dozen 1 fr Lbs..... \$2.00 One Dozen in a Box.



Pointed Forged Tool Steel Blades
Carefully Tempered, Mahogany Finish Hardwood Handle, Nickel Plated Ferrule, Pointed Blade. Per Dozen
No. 1055—Blades 1½ in. Long, Weight Per Dozen
1½ Lbs. \$2.00
One Dozen in a Box.

#### HURWOOD BELT



Eye Point

# AWL HAFTS

#### PATENT SEWING



## Applewood

Per Dozen

No. 6½-3¼ in. Long, Steel Chuck, for Patented Blades, with Wrench, Weight Per Dozen 2 Lbs. \$2.40 One Dozen in a Box.

#### PATENT PEGGING



Hickory, Leather Top

Per Dozen

No. 6—4 in. Long, Steel Chuck, for Patented Blades, with Wrench, Weight Per Dozen 2 Lbs......\$2.40 One Dozen in a Box.

# SEWING AWLS

#### SPEEDY STITCHER



Cut Shows Awl Cut Open to Show Bobbin and Set of Needles on the Inside.

For Mending Harness, Shoes, Auto Tops, Etc.

Per Dozen

No. 75—Polished Rock Maple Handle, Nickel Plated Parts, Complete with 4 Diamond Pointed Grooved Needles for All Kinds of Sewing, 1 Special Needle for Tapping Shoes, 1 Awi for Making Buckle Holes and Best Shoemakers' Waxed Thread, Weight Per Dozen 4 Lbs....\$9.00 One in a Carton; Six Cartons in an Easel Back Display Case.

#### EXTRA NEEDLES FOR SPEEDY STITCHER

NE	EDLES	MO.	7	FOR ORDIN	
N0.4	FOR SEWING SHOES	NO.	8	FOR HE	
NO.6	FOR LIGHT HARNESS WORK	NO.B	FOR	SOLING	SHOES
	Illustratio	ons Half Siz	e.		***

				Per Dozen
No.	4	-Needle.	for	Sewing Shoes
No.	6	-Needle,	for	Light Harness Work 1.50
No.	7	-Needle,	for	Ordinary Harness Work 1.80
No.	8	-Needle,	for	Heavy Harness Work 1.80
No.	8.	-Needle,	for	Soling Shoes 2.00
		(	One	Dozen in a Package.

# EXTRA THREAD FOR SPEEDY STITCHER



BOBBIN WITH



WAXED THREAD

		Per Dozen Skeins
Extra	Thread-30 Yard Skeins,	Waxed\$3.00
		Per Dozen
Extra	Bobbin-With Thread	
	One Dozen in	a Box.

### AWLS

PATENT PEG



Per Gross

#### PATENT SEWING



Xo. 51—Extra Cast Steel, Assorted.......\$7.00
One-half Gross in a Box.

#### PATENT HARNESS

# NEEDLES

BENT PACKING

Polished Steel, Extra Large Eyes

 Length, Inches
 4
 5
 6
 7
 8

 Weight Per Paper, Oz
 5
 9
 15
 25
 30

 Per Dozen
 80
 30
 45
 60
 1
 00
 1
 25

 Three Dozen in a Paper

#### UPHOLSTERERS

 Polished Steel, Double Point

 Length, Inches
 8
 10
 12

 Weight Per Dozen, Oz
 2
 3
 4

 Per Dozen
 \$1.25
 1.50
 1.75

# One Dozen in a Paper. MATTRESS

#### SAIL

∀ 0

 Polished Steel, Triangular Point

 Nos.
 4
 6
 8

 Length, Inches
 2 ½
 3
 3 ½

 Weight Per Package, Oz
 2
 3
 4

 Per Package
 \$0.25
 35
 50

# Twenty-five in a Package. CURVED UPHOLSTERERS



Polished Steel, Spear Point Full Length Around Curve.

 Length, Inches
 ...
 5
 6
 7

 Weight Per Dozen, Oz
 1½
 1½
 1¾

 Per Dozen
 ...
 \$2.00
 2.50
 3.50

 One Dozen in a Package.

## NAIL SETS SYRACUSE



#### Round Body

Twist Drill Steel, Tempered Ends, Knurled Body, Blued Finish, Cupped Point.

95 Average Weight Per Dozen 1 Pound. One Dozen in a Box.

#### STANLEY



#### No. 11-Round Body

High Grade Tool Steel, Tempered Ends, Knurled Body, Cupped Point, 4 inches Long.

Diam. Point, Inches. . 2/32 Per Dozen ....... \$1.80 1.80 Diam. Point, Inches. 3/32 4/32 One Dozen in a Box.

#### Display Assortments

Each No. 11A-1 Dozen Sets.....\$1.80 No. 11B-2 Dozen Sets..... 3.60 Assorted Sizes 2/32 to 4/32 inches.

#### MAYHEW SQUARE HEAD



# Will Not Roll

Hand Forged Crucible Steel, Electrically Tempered, Knurled Body, Cupped Point.

Per Dozen One Dozen in a Box.

#### MILLERS FALLS



# Square Head, Machined Cup Points

Large Striking Surface. Will Not Roll.

...... 451 452 453 Nos. 454 Fize Point, Inches 1/32 2/32 3/32 Per Dozen \$2.50 2.50 2.50 4/32 2.50

#### Assorted Sizes

Per Dozen No. 4501—4 in. Long, A in. Diameter, Assorted Points, 1/32, 2/32, 3/32 and 4/32 in., Weight Per Dozen 17 Oz......\$2.50 One Dozen in a Box.

#### MILLERS FALLS NAIL SET DISPLAY



## With Square Head Nail Sets

This attractive Display Stand is furnished with Two Dozen Millers Falls Square Head Nail Sets in Assorted Sizes, as described above.

The Stand is enameled a deep rich red with trade mark on base. It takes up but a small amount of counter space.

No. 4500-Assortment with 3 Dozen Nail Sets, Height Including Sets 5 1/2 in., Diameter of Base 4 1/4 in., 

# MACHINISTS SCRIBERS

STARRETT IMPROVED



With Adjustable Points

The points are made of a fine grade of steel, nicely tem-ed. The knurled stock is of sufficient size to be easily held without cramping or turning in the fingers. The long, bent point will be found a valuable auxiliary for reaching through holes, etc. The knurled sleeve is nickeled.

No. 67—Length with Short Bent Point 9 in., with Long Point 12 in., Interchangeable Parts, Complete ......\$0.60 No. 67A-Without Long Point.... .45 Extra Straight Points ..... . 15 Extra Bent Points ..... . 15 Extra Long Bent Points ..... Six in a Box.

#### STARRETT ADJUSTABLE SLEEVE

Nickel Plated, Knurled Sleeve

The knurled sleeve has a hole clear through and a clamping device at one end, adapting it for slipping on or off different tools, securely holding them near to or away from the working point. The knurled sleeve is nickeled.

- 8 in. Long, without Knife Point......80.60 No. 68B-12 in. Long, without Knife Point..... . 60 Extra Knife Point ..... .20 Extra Scriber Point . Six in a Box.

#### STARRETT POCKET



Hexagon Heads Prevent Rolling This Tool is made from Steel Tubing, Knurled and Nickel Plated. The Scriber is made from the best quality steel, nicely tempered, and is held by a knurled chuck. The Scriber is reversible, telescoping into the stock, and is held by a slight turn of the chuck so that it is always as safe to carry in the pocket as a penknife.

No. 70A-1/4 in. Diameter Handle, 2 % in. Blade . . . \$0.35 No. 70B-% in. Diameter Handle, 2% in. Blade... .50 Six in a Box.

#### MAYHEW



Embossed Hand Hold

Forged Steel, Polished Point and Head. Has a fine sharp point and is tapered properly so as not to obscure the view of the operator. No. 499-6 in. Long, 32 in. Diameter, Weight Per

# BELL CENTERING PUNCHES



For Centering Oval or Flat Surface Forged Steel Bell, Polished, Solid Tool Steel Punch Hardened and Tempered.

No. 1-Centers Shafts Up to 1% in. Diameter, No. 2-Centers Shafts Up to 2 in. Diameter, Weight Each 16 Oz..... 1.75

This tool will accurately center any oval or flat surface. The punch is movable up and down and can be removed or replaced when necessary.

#### CENTER PUNCHES STARRETT SPRING

# The second secon

With Removable Point

The unique construction of this Punch brings it nearly in the automatic center punch class. While eliminating the use of the hammer it operates entirely different from the types heretofore available. Hold in position with one hand and with the other pull up the head and let go. The spring hammers the drive on the pin on the punch holder. By varying and repeating the "pull up" of the head, very small or large indentations are possible. All parts subject to wear are hardened and it is knurled for firm grip. The tip Each or point can be easily removed. No. 53-3 1/2 in. Long, 3/8 in. Diameter . . . . . . . ... \$1.35 Extra Points ...... One in a Box.

# STARRETT ADJUSTABLE AUTOMATIC

# Automatically Strikes a Blow

Adjustable Point, Contains a Mechanism which Delivers a Blow of Force Required when in exact position desired by the operator. When adjusted for either light or heavy stroke, all indentations are of uniform size for the starting of a drill, etc.

Nos	18AA	18A	18B
Length, Inches	3 1/2	5	6
Diameter, Inches	3/8	1/2	98
Weight Each, Oz	1	3	4
Each	\$1.80	2.40	3.00
Extra Points	.20	.20	. 20
One in	a Box.		

# BROWN & SHARPE AUTOMATIC

#### No. 770—Tool Steel, Adjustable Point

Striking Mechanism Enclosed in Knurled Handle. 3 1 2 Size ... . . . . . . . . . . . . . . . . 5 1/4 6 Length, Inches ...... 4 1/8 5% 34 Diameter, Inches ..... 3/8 10 3.00 4.00

A downward pressure releases the striking block and makes the impression. The punch marks are of uniform depth.

One in a Box.

#### BROWN & SHARPE ADJUSTABLE AUTOMATIC

Tool Steel, Adjustable Point

Striking Mechanism Enclosed in Knurled Handle. The length of stroke is adjustable for light or heavy impressions. The adjustment is made by Knurled Thumb Screw on top of the Handle. No. 771-5 1/2 in. Long, 5/8 in. Diameter, Weight Each

One in a Box.

#### STARRETT SQUARE With Knurled Grip, Will Not Roll High Grade Tool Steel, Tempered Throughout. Nos..... 264A 264B 2 1/8 Dia. Point, In... dr. Length, In. .... 3 16 1/2 Wt. Each, Oz.... .25 Each ..... \$0.25 264D 264E 264F 264G 264C Nos. . . 3 % 3 % Diameter Point, In... 1/8 4 1/4 14 $5\frac{1}{16}$ 3 7% 4 1/2 Length, Inches .... 1 1/2 2 1/2 1 14 2 Weight Each, Oz .... 1 . 40 .25 .35 .35 \$0.25 Sizes A to F, Twelve; Size G, Six in a Box.

# CENTER PUNCHES

STARRETT



With Knurled Finger Grip

Extra Quality Steel, Hardened and Polished.

Nos	117A	117B	117C	117D	117E
Diam. Point, Inches.	de	45	21	22	1/4
Length, Inches	4	4	4	4	5
Each	\$0.20	. 20	.20	20	30
	Six in a	Box.			

#### MAYHEW



#### Embossed Hand Hold

Forged Tool Steel, Tempered, Polished Point and Head, 6 in. Long. 491A 491B 1/2

Nos. Diameter Stock, Inches..... 2 14 Weight Per Dozen, Lbs..... 3 5% 3.50 \$3.50 Per Dozen ..... One Dozen in a Box.

#### MAYHEW OCTAGON



#### Octagon, Cast Steel

Black Finish, Polished Points, Tempered. Per Dozen

No. 415-4 in. Long, % in. Body, Weight Per Dozen .... \$1.50 1 % Lbs. .... One Dozen in a Box.

## PRICK PUNCHES MAYHEW

# 

# Embossed Hand Hold

Forged Tool Steel, Tempered, Polished Point and Head, 6 in. Long.

Nos	492A	492B
Diameter Stock, Inches	3.3	1/2
Weight Per Dozen, Lbs	2	3 %
Per Dozen	\$3.50	3.50

#### MAYHEW KNURLED



#### Knurled Hand Hold

Forged Tool Steel, Tempered, Polished Point and Head. Per Dozen

No. 438-4 in. Long, A in. Diameter, Weight Per Dozen 1 ½ Lbs... One Dozen in a Box.

## MAYHEW OCTAGON



Octagon, Cast Steel

Black Finish, Polished Points, Tempered. Per Dozen

No. 410-4 in. Long, 38 in. Body, Weight Per Dozen 1 Lb. 9 Oz..... One Dozen in a Box.

# SOLID PUNCHES



#### Embossed Hand Hold

Forged Steel, Polished Points and Heads.  $\frac{1}{2}$  in. Diameter, 6 in. Long.

Nos	32	490B ½ 3.00	490C 3.00	490D 3.00
Nos. Diam. Point, Inches Per Dozen		490F 1/4 3.50	490G 3.50	490H 3/8 3.50

Weight Per Dozen 3 % Pounds. One Dozen in a Box.

# PIN PUNCHES

MAYHEW



#### Embossed Hand Hold

Forged Tool Steel, Tempered, Polished Point and Head, 6 in. Long.

Nos	493A	493B	493C	493D
Diam, Point, Inches		1,6	.5.	_3_
Diam. Stock, In	13	13	32	3.3
		3.2	3.2	32
Per Dozen	\$3.50	3.50	3.50	3.50
Nos	493E	493F	493G	493H
Diam. Point, Inches		34	5	
		74	1.6	3/8
Diam, Stock, In	45	16	3/2	1/2
Per Dozen :	\$3.50	3.50	3.50	3.50

Average Weight Per Dozen 3 Pounds. One Dozen in a Box.

#### STARRETT



#### Extra Long, for Motor Service and Machine Shop Work

Tool Steel, Tempered, Knurled Body, Polished Head and Shank 8 in, Long, 4½ in. Knurled Grip, 3½ in. Pin Drive.

Nos Diam. Point, Inches Weight Each, Oz	1/8 3	248B 3 ½	248C 1/4 4	248D 18 4 1/2	248E 3/8 5
Each	\$0.35	. 35	. 35	. 35	.35
	Six i	n a Box			

#### MAYHEW, IN SETS



#### Hand Forged, Electrically Tempered

High Grade English Steel, Octagon Grip, ½ in. Diameter, 6 in. Long. Particularly offered for Automobile Repair Work.

These punches are tempered right and finely finished, the straight points are long enough to drive the most refractory pin clear out without "sticking" the punch.

They are especially designed for the requirements of Garage Repair Men.

# DRIFT PINS



Stock Type Hand Forged Tool Steel, Natural Finish. Size, Inches.... 18 18 Length, Inches. . 5 1/2 6 6 1/2 7 7 1/2 9 34 Wt. Dozen, Lbs. 2 4 6 34 13 Per Dozen..... \$3.50 3.50 4.00 4.00 4.00 4.00 ATHA

€ 6		-		•	
No. 1060C.			No. 10	60S.	
No. 10	60C-Ba	arrel Tr	vpe		
Size, Inches	10	13	13	10	115
Length, Inches	6 1/2	6 3/4	7.5%	7.7%	8
Weight Each, Oz	5	8	13	18	21
Each	80.30	.30	.30	.35	. 55
No. 106	os-str	aight T	ype		
Size, Inches	10	11	12	18	11/2
Length, Inches	6 1/2	6 %	7.5%	7.7%	8
Weight Each, Oz	5	8	13	18	21
Each	80.30	.30	.30	.35	.55

# ARCH PUNCHES



No. 5-Alloy Tool Steel For Cutting Canvas, Felt, Leather, Sheet Lead, Soft Brass, Copper Sheets and other Soft Materials, Size, Inches.... 17 Wt. Dozen, Lbs.. 4 16 4 Per Dozen..... \$10.65 11.20 12.30 12.30 13.45 Size, Inches. 3/4 13 76 1 Wt. Dozen, Lbs.. 9 10 10 10 13 Per Dozen..... 813.45 14.55 14.55 15.70 15.70 Size, Inches.... 11/8 1 % 1 % 114 15 Wt. Dozen, Lbs.. 1246 12 2.0 23 Per Dozen..... \$20.15 20.15 24.65 24.65 26.90 Size, Inches.... 1 % 1 % 1 1/6 1 % 1% Wt. Dozen, Lbs. . 21 91 21 9.1 24 Per Dozen..... \$29.00 32.50 35.85 39.20 43.00 Size, Inches..... 1 % 2 21/8 2 1/4 Wt. Dozen, Lbs..... 25 26 27 32 Per Dozen.... \$47.00 52.35 57.40 64.40  $\frac{7}{16}$  to 1 in., Two in a Box; Larger Sizes, One in a Box.

METAL PUNCHES



No. 25—Forged Tool Steel, Tempered For Cutting all kinds of Soft Sheet Metals, also Sheet Steel and Sheet Iron 32 in. Thick,

Size, Inches..... 34 36 Wt. Dozen, Lbs... 3 4 14 5 16 7 Per Dozen . . . . . . . \$12.00 12.50 13.50 14.50 Size, Inches..... 1 1 34 1 16 Wt. Dozen, Lbs..... 10 17 14 Per Dozen ..... \$16.00 25.00 36.00 ½ to 1 in., Two in a Box; Larger Sizes, One in a Box.

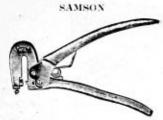
MORRILL Semi-Steel, Cast Finish, Spring Handle



No. 1—7 in. Long. Throat ¾ in. Deep, ¼ in. Wide, with 1 Set of Dies, Sizes ¼, ½, ½, ½, ½, ¼, ¼, ¼ or ¾ in., Wt. Each 11 Oz......\$2.00

Six in a Box.

## HAND METAL PUNCHES



#### Stamped Steel, Nickel Plated

Maximum power with steel, A in through 20 gauge. Will punch through is in, brass and paper in any thickness to the capacity of its throat opening; also slate with-out cracking. Depth of throat 1% in. Tools installed with A in. punch and die, other sizes supplied if wanted.

No.	18-7	in.	Long, with One Punch and Die, Weight	22000
	Each	16	Oz	3.50
			One in a Box.	or Sat

No.	1PD—Six	Punches and	Dies, One	Each	d, 18.
	1/2 + 1/4 + 1/2	and 14 in			

#### WHITNEY



Main Parts Drop Forged Steel, Best Tool Steel Studs, Dies, Punches, Etc.

Each No. 2—Whitney, 23 in Long Over All, Capacity fa in Hole in 14 in Iron, or Equivalent. 

#### EXTRA DIES AND PUNCHES

Size.	Inches	1,8	32	10	1/2	14	10	78	16
Each		80.45	. 45	.45	. 45	. 45	. 45	. 45	.45

Most powerful and easiest operated Hand Metal Punch on the market. Can be used anywhere with or without vise, in machine, and repair shops, boiler shops, by cornice, tank and stack builders. Simple in operation.

When ordering, always state size to be punched.

# SCREW PUNCHES



CAST STEEL

With One Punch and Die

When ordering, state size of hole to be punched.

Depth of throat is distance from center of punch.

Nos	0	1	2	3
Punches Hole, Inches		1/2	5%	3/4
For Thickness of Metal In.	10	18	1/2	78
Depth of Throat, Inches.		1 1/2	2 1/4	3
Weight Each, Lbs		27	40.00	60.00
Each		2.40	2.40	3.00
Extra Punches Each,		1.60	1.60	2.00
Extra Dies Each,	1.40	1.00	4.00	2.00

Note-When ordering Extra Punches and Dies, always specify size to be punched, also state number of Screw Punch in which they are to be used.

# SPRING PUNCHES

SINGLE TUBE



#### With Drive Tubes

Forged Steel, Polished, Flat Steel Spring, Per Dozen No. 239-8 in. Long. Assorted Tubes, 2 to 16/32nds. Extra Tubes One-half Dozen in a Box.

#### REVOLVING FOUR TUBE



#### With Drive Tubes

, Forged Steel, Polished, Flat Steel Spring. Per Dozen No. 224-8 in. Long, Tubes Assorted Sizes, Weight Extra Tubes . . One-half Dozen in a Box.

#### REVOLVING SIX TUBE



#### With Drive Tubes

Forged Steel. Polished, Flat Steel Spring. Per Dozen No. 225-8 in. Long. Tubes Assorted Sizes, Weight Per Dozen 9 1/2 Lbs..... One-half Dozen in a Box.

#### KRAEUTER REVOLVING



No. 18.

High Grade Forged Steel Handles and Jaws, "Don't Slip" Knurled Handles, Highly Polished

Per Dozen

No. 18-8% in. Long, 4 Best Quality Steel "Screw Tubes, Nos. 4, 6, 7 and 9, Weight Per Dozen No. 19—834 in. Long. 6 Best Quality Steel "Screw" Tubes. Nos. 4 7 7 6 7 7 Quality Steel "Screw"

Tubes, Nos. 4, 5, 6, 7, 8 and 9, Weight Per Dozen 9 1/2 Lbs.. One-half Dozen in a Box.

# SADDLERS PUNCHES

PEXTO



#### Forged Steel, Full Polished

2.5						
1	2				6	7
3.0	92	11	1.9	1.3	13	
8	9					14
3.5	14	32	3.6	33	%	32
16	16	2.0	32	3.2	34	36
83.50	3.50	4.30	4.30	4.30	7.10	7.10
	83.00 8 16 83.50	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

# TICKET PUNCHES

CONDUCTORS



#### Nickel Plated

Forged Steel Frame, Tempered Steel Dies and Plunger, Assorted Designs.

Per Dozen

#### LONG REACH



#### Nickel Plated

Forged Steel Frame, Tempered Steel Die and Plunger, Assorted Designs.

Per Dozen



#### Nickel Plated

#### BRIDGEPORT



#### With Reservoir

Sheet Steel, Nickel Plated, Tempered Steel Stripper and Main Spring, Scored Handles, Assorted Designs.

No. 32—5 in. Long, Weight Per Dozen 24 Lbs.....86.00

The reservoir holds the clippings, thus preventing them littering the floor.

One-half Dozen in a Box.

# STEEL LETTERS AND FIGURES



#### Machine Made

Roman Style, Forged Steel, Carefully Drawn, Hardened and Tempered, will cut sharp and true, adapted for stamping Soft Steel, Iron, Brass, Wood, Fibre, etc.

#### Figures, In Sets

Weight Per Set, Lbs Per Set	\$0.90	. 90 3,5	58 . 90	1 1 1.13	1 1 1.25
Size, Inches Weight Per Set, Lbs	14	18 1 56	3/8 2 3/6	177 2 84	1/2 2 3/4
Per Set	\$1.50	1.75	2.50	3.50	4.50

A Set of Figures consists of Nos. 1, 2, 3, 4, 5, 6, 7, 8 and 0. No. 6 is used for figure 9 by reversing.

#### Letters, in Sets

Size, Inches	1	$1\frac{1}{4}$ 2.70	$1\frac{1}{8}$ $1\frac{1}{2}$ $2.70$	2 % 3 . 39	2 % 3 . 75
Size, Inches Weight Per Set, Lbs Per Set	3 1/4	4 7% 5 . 25	3% 6 1/4 7 . 50	10 TO	1/2 7

A Set of Letters consists of 28 pieces, the complete Alphabet, with a period and character &.

#### Separate Letters and Figures

Size,	Inches	Te Te	3/3	1/8	52	10
		\$0.15	. 15	.15	.16	. 18
	Inches	80.20	18 30	3/8 .40	7te .50	1/2 50

# RIVET SETS

PEXTO TINNERS



#### No. 46—Especially Adapted for Sheet Metal Workers Forged from High Quality Steel, Full Polished.

	-		T CHICK	C-CE-I
Sizes	. 00	0	1	2
Hole Inches	. 5	3/2	1.5	.2130
Drill Size	540	-2-	15	3
For Iron Rivets, Lbs	. 14	10.12	7.8	6
For Copper Rivets, Nos.			6	7
Weight Per Dozen, Lbs.	1016	1014	6.8/	6.8/
Each	. 81.05			
	QI. 00	1.00	. 90	.90
Sizes	. 3	4	5	6
Hole, Inches	1910	.1660	.1495	.1405
Drill Size	. 11	1.9	2.5	28
For Iron Rivets, Lbs	. 4, 5	2 1/4 . 3	134.2	1 1/6
For Copper Rivets, Nos.	. 8	9	10.11	12
Weight Per Dozen, Lbs.	. 5	5	5	2 34
Each		.70		.55
Size 00 to 2, Two in a	Box, Size	s 3 to 8,	Six in a	Box.

# LACE LEATHER CUTTERS

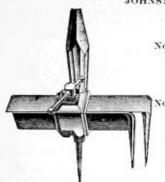


Steel, Polished Blade and Gauge, Black Enameled Body

No. 1—Cuts fa to % in. in Widths. \$6.00

## WASHER CUTTERS

JOHNSTON



#### Adjustable

#### HARGRAVE



With Graduated Gauge

Japanned Malleable Iron Body, Polished Tool Steel Blades, For Cutting Leather, Rubber, Etc., with Bit Brace Shank

Nos	405	407
Capacity of Cut. Inches	4	6
Weight Each, Ozs	5	5 1/2
Each	\$1.50	1.75
Six in a Box,		

#### HARGRAVE DOUBLE HANDLE



With Graduated Scale

Japanned Malleable Iron Body, Polished Tool Steel Blades, Stained Hardwood Handles. Each

# CIRCLE METAL CUTTERS

HARGRAVE





For cutting circular holes in sheet metal, wood or fiber. Especially useful for installation of Auto Clocks, etc.

The body of the tool is malleable iron, and the blades of best tool steel, ground and tempered for cutting metal.

Adjusted by knurled thumb screw.

Each

# BEARING SCRAPERS

ENGINEERS



In Varnished Hardwood Case

High Grade Steel Tools, Full Polished, Ground Face.
Per Set
No. 1750—Set of 6 Scrapers, One Each 8, 10 and 12
in. Bent Blade, One Double End and One Trian.

#### MACHINISTS



#### Non-Chattering

Hand Forged Tool Steel, Ground Sharp Edges, the most perfect Bearing Scraper made. Positively non-chattering, polished Blades. Ebony Shank, Hardwood Handle.

Per Set

One Set in a Box.

# CARBON SCRAPERS

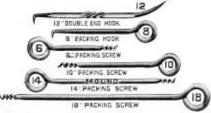


Designed for removing soot from the top of a piston without taking off the head of the cylinder. Made of 14-in. crucible steel, hand forged, highly polished. Fastened in applewood handles.

Per Set

No. 1771—3 Screpers, Weight Per Set ½ Lbs......81.80 One Set in a Box.

# ENGINEERS PACKING TOOLS



## COTTER PIN EXTRACTORS



# ADJUSTABLE PLANES

#### STANLEY "BED" ROCK

In the Bedrock Planes the bottom of the Frog is machined so as to make it a tongue which fits into a groove formed in the bottom of the Plane. This insures great solidity and perfect alignment between the Frog and the bottom. The movement of the Frog in the groove for widening or opening the throat and the loosening or tightening of the Frog to the base of the plane is governed by screw adjustment which may be operated without removing the cap on the cutter. Rosewood Handles and Knobs,





	140, 000.	10.004.	
		Bottom	
No.	602-7 in. Long, 1 % in.	Cutter, Weight Ea	ich
	2 1/2 Lbs		\$4 . 25
No.	603-8 in. Long, 1 1/4 in.	Cutter, Weight Ea	tch
	3 1/4 Lbs		. 4.40
No.	604-9 in. Long, 2 in. Cutt	ter, Weight Each 3	56
	Lbs		
No.	604 1/2 -10 in. Long, 2 % in.	. Cutter, Weight Ea	ich
	4 % Lbs		. 5.55
	JACK AND	FORE	

# No. 605.

	With Smooth Bottom	Each
No.	605-Jack, 14 in. Long, 2 in. Cutter, Weight Each	
	4 ½ Lbs	\$5.55
No.	605 1/2 - Jack, 15 in. Long, 2 1/4 in. Cutter, Weight	
	Each 6 1/2 Lbs	6.25
No.	606-Fere, 18 in. Long. 23/8 in. Cutter. Weight	
	Each 7% Lbs	7.10



No.	607-22 in.	Long. 2 %	in. Cutter,	Weight Each
	8 % Lbs			
No.	608-24 in.	Long, 2 %	in. Cutter.	Weight Each
	9 % Lbs			9 . 70

# SMOOTH, JACK, FORE AND JOINTER





	No. 606C.	
No.	With Corrugated Bottom 603C—Smooth, 8 in, Long, 1 % in, Center, Weight	Each
	Each 3 1/4 Lbs	4.65
No.	604C-Smooth, 9 in. Long, 2 in. Cutter, Weight	
	Each 3 % Lbs	5.10
No.	605C-Jack, 14 in. Long. 2 in. Cutter, Weight	
	Each 41/2 Lbs	5.85
No.	606C-Fore, 18 in. Long. 23 in. Cutter, Weight	
	Each 7% Lbs	7.50
No.	607C-Jointer, 22 in. Long. 2% in. Cutter,	
1200	Weight Each 8% Lbs	8.55
No.	608C-Jointer, 24 in. Long. 2 % in. Cutter.	
	Weight Each 9 % Lbs	10.20

All Above, One in a Box.

#### BAILEY IRON BENCH

In the Bailey Plane the Frog may be adjusted for width of throat opening after removing the Cap and the Cutter and slightly loosening the screws. Rosewood Handle and Knob.

#### SMOOTH





No. 3.

No. 4.

	With Smooth Bottom	Each
No.	1-5 1/2 in. Long, 1 1/4 in. Cutter, Weight Each 1 1/4	
i concentro	Lbs	\$3.00
No.	2-7 in. Long. 1% in. Cutter, Weight Each 21/4	
200	Lbs	3.85
No.	3-8 in. Long, 1% in. Cutter, Weight Each 3%	
***	Lbs.	4.00
No.	4-9 in. Long, 2 in. Cutter, Weight Each 3%	
	Lbs.	4.40
NO.	432-10 in. Long. 23 in. Cutter, Weight Each	
	4 % Lbs	5 00

#### JACK, FORE AND JOINTER



No. 6.

	With Smooth Bottom	Each
No.	5-Jack, 14 in. Long, 2 in. Cutter, Weight Each	
	4 % Lbs	\$5.00
No.	51/4 - Jack, 111/2 in. Long, 11/4 in. Cutter, Weight	
	Each 3% Lbs	4.50
No.	51/2-Jack, 15 in. Long. 21/4 in. Cutter. Weight	
2.000	Each 6% Lbs	5.70
No.	6-Fore, 18 in. Long, 2% in. Cutter, Weight	
	Each 7% Lbs	6.50
No.	7-Jointer, 22 in. Long, 2 % in. Cutter, Weight	
	Each 8 Lbs	7.40
No.	8-Jointer, 24 in. Long. 2% in. Cutter, Weight	
	Each 9% Lbs	8.85

# SMOOTH, JACK, FORE AND JOINTER



	With Corrugated Bottom	Each
No.	3C-Smooth, 8 in. Long. 1 % in. Cutter, Weight	Lauch
	Each 3 Lbss	4.20
No.	4C-Smooth, 9 in. Long. 2 in. Cutter. Weight	
	Each 3% Lbs	4.60
NO.	4 % C-Smooth, 10 in, Long. 2 % in Cutter	
	Weight Each 4% Lbs	5.30
No.	5C-Jack, 14 in. Long, 2 in. Cutter, Weight Each	
No	4 % Lbs.	5.30
	534 C-Jack, 111/2 in. Long, 13/4 in. Cutter	
No.	Weight Each 3 4 Lbs.	4.75
44.00	5½C-Jack, 15 in. Long. 2¼ in. Cutter, Weight	
No.	Each 6% Lbs.	6.00

No. 7C-Jointer, 22 in. Long. 2% in. Cutter, Weight Each 8 Lbs.... 7.80 No. SC-Jointer, 24 in. Long, 2 1/8 in. Cutter, Weight Each 9 % Lbs..... 9.30

6.80

No. 6C-Fore, 18 in, Long, 2% in. Cutter, Weight

Each 7 % Lbs.....

All Above, One in a Box.

# ADJUSTABLE STEEL PLANES

#### STANLEY



#### With Smooth Bottoms.

Rosewood Handles and Knobs.

These Planes are similar in design to the regular Bailey Iron Plane, but are of forged steel construction. They have the toughness to withstand a blow from a fall or other cause that would break the regular iron plane.

No. S4-Smooth, 9 in. Long, 2 in. Cutter, Weight Each 3 Lbs. ..... No. S5-Jack, 14 in. Long, 2 in. Cutter, Weight Each One in a Box.

# ADJUSTABLE ALUMINUM PLANES

#### STANLEY

These new Planes are the regular Stanley "Bailey" type of Bench Planes having the same adjustable features as regards the frogs and cutters. The bottom and frogs are made of Aluminum instead of iron which provides an exceptionally light tool that will not rust. They are equipped with rosewood handles and knobs.

#### SMOOTH



With Smooth Bottom

Each No. A4-9 in. Long, 2 in. Cutter, Weight Each 21/4 One in a Box.

# JACK



With Smooth Bottom

Each No. A5-14 in. Long, 2 in. Cutter, Weight Each 2 % One in a Box.

#### FORE



## With Smooth Bottom

Each No. A6-18 in, Long, 23% in. Cutter, Weight Each One in a Box.

# ADJUSTABLE IRON PLANES

#### GAGE SELF-SETTING

The Self-Setting Feature lies in the fact that the Plane Iron, if taken out to be sharpened, goes back in exactly the same position as before removed. Rosewood handle and knob, iron body.





No. G4.

No. G5.

	With Smooth Bottoms	Each
No.	G4-Smooth, 9 in. Long, 2 in. Cutt	er Weight
	Each 3 Lbs	81 00
No.	Go-Jack, 14 In. Long, 2 in Cutt	er Weight
No.	Each 4 1/4 Lbs	er Weight
	Each 5 % Lbs	6 90
No.	G7-Jointer, 22 in. Long, 2 1/6 in. Cut	ter. Weight
	Each 6 ½ Lbs	7.80
		-





			-10-	0.00
	With Corrugated	Botto	ms	Each
No.	G4C-Smooth, 9 in. Long,	2 in,	Cutter,	Weight
No.	Each 3 Lbs	2 in.	Cutter,	<b>\$4.8</b> 5 Weight

No. G6C-Fore, 18 in. Long, 214 in. Cutter, Weight Each 5% Lbs..... No. G7C-Jointer, 22 in. Long, 21/2 in. Cutter, Weight Each 6 1/2 Lbs...... 8.15

The upper part of the plane irons of these planes are cast and has a steel bottom fastened to it by screws.

One in a Box.

#### SIEGLEY

These Planes have cutters adjustable lengthwise and laterally. The cutters are solid steel, very thin for fine work. They have varnished hardwood handles and knobs.

#### SMOOTH



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			Room
Constanting	Marine States	GUU 1900 p. J.	ball branch.

With Corrugated Bottoms

No. S4C-Smooth, 9 in. Long, 2 in. Cutter, Weight 

#### JACK, FORE AND JOINTER



	with Corrugated Bottoms	Each
No.	S5C-Jack, 14 in. Long, 2 in. Cutter, Weight	
	Each 4 Lbs	5.00
NO.	S6C—Fore, 18 in. Long, 21/4 in. Cutter, Weight Each 51/2 Lbs.	6 50
No.	S7C-Jointer, 22 in. Long. 2 % in. Cutter. Weight	
No.	Each 6½ Lbs	7.40
	Each 9½ Lbs.	8.80

# WOOD BOTTOM PLANES

#### BAILEY ADJUSTABLE

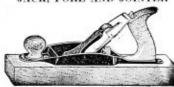
A Wood Plane of Superior Quality. The Bottom, Handle, and Knob are made from selected and well seasoned beech, the Cutters are the regular "Bailey" Type, and are adjustable both endwise and sidewise.

The Frog is held in place by two machine screws which pass through the top iron and screw into two brass lugs. These lugs are screwed and securely pinned into the wood bottom. This method holds the wood bottom and top iron firmly together. Black Japanned Iron Frame.

#### HANDLED, SMOOTH



# JACK, FORE AND JOINTER



# WOOD BENCH PLANES

#### SMOOTH

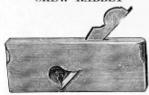


No. 3—8 in. Long. 2 in. Double Iron, Polished Start, Average Weight Each 1½ Lbs.......\$2.00

# JACK

No. 19-22 in. Long, 23/8 in. Double Iron, Polished

# FANCY WOOD PLANES SKEW RABBET



No. 146—Beechwood, Forged Steel Cutter
Width Cutter, In. 14 15 15 15 15 15 15 15 160
Wt. Each, Lbs. 14 15 15 15 160
NOSING

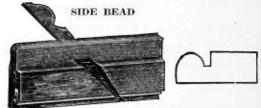


 No. 113—Beechwood, Forged Steel Double Cutters

 Width Cutter, Inches.
 34
 1
 1½
 1½

 Weight Each, Lbs.
 1½
 1½
 1½
 1½
 1½

 Each
 \$3.20
 3.20
 3.20
 3.70





No. 51—Beechwood, Forged Steel Cutter, Double Boxed Width Cutter, Inches. 1/8 1/5 1/4 1/5 3/8 1/2 Weight Each, Lbs... 5/5 5/6 3/4 3/4 7/6 7/6 Each ...... \$2.00 2.00 2.00 2.00 2.00 2.00



#### HOLLOWS AND ROUNDS

The Round Plane Cuts the Hollow, and the Hollow Plane Cuts the Round.

Note—When Ordering Separate Planes, Always State Whether the Hollow or Round Plane is Wanted,

Hollow Round

Beechwood, Forged Steel Cutters 92A 92B 92C 92E 92D 14 Width Cutter, Inches ... 3% 1/2 34 Circle Worked, Inches. 34 1 11/4 Weight Pair, Lbs..... 1 1 % Per Pair ..... \$3.20 3.20 3.20 3.20 3.20 . . . . . . . . . . . . . . . . . . . 92F 921 926 92H Width Cutter, Inches..... 3/8 1 1/8 114 Circle Worked, Inches..... 2 1/4 1 % 2 1/2 Weight Pair, Lbs..... 2 14 2 14 Per Pair ..... \$3.20 3.60 3.60 3.60

# IRON BLOCK PLANES

STANLEY



Non-Adjustable

Japanned Iron Frame, English Steel Cutter, Tempered and Ground, Honed Ready for Use. Each No. 101—3½ in. Long, 1 in. Cutter, Weight Each ¼ Lb. \$0.45



Japanned Iron Frame, English Steel Cutter, Tempered and Ground, Honed Ready for Use. Each No. 100—3½ in. Long, 1 in. Cutter, Weight Each



Non-Adjustable

Japanned Iron Frame, Polished Face, English Steel Cutter, Tempered and Ground, Honed Ready for Use.



Endwise Lever Adjustment

Japanned Iron Frame, Polished Face, English Steel Cutter, Tempered and Ground, Honed Ready for Use. Each



Non-Adjustable



Endwise Lever Adjustment



Endwise Screw Adjustment

Japanned Iron Frame, Polished Sides and Face, Nickel Plated Adjusting Screw, Rosewood Knob, Lever Cap. Each

# IRON BLOCK PLANES

BAILEY ADJUSTABLE



Adjustable Throat

Iron, Frame, Japanned Trimmings, Polished sides and Face, Handy Grip, Endwise Screw and Lateral Lever Adjustment. Each



Adjustable Throat
Iron Frame, Nickel Plated Trimmings, Polished Sides
and Face, Handy Grip, Endwise Screw and Lateral Lever
Adjustment. Each



Adjustable Throat, Knuckle Joint

Japanned Iron Frame, Polished Sides and Face, Nickel Plated Trimmings, Handy Grip, Endwise Screw and Lateral Lever Adjustment.

The knuckle joint permits a great leverage, consequently the lever can be placed in position or removed with very little effort.

STANLEY LOW ANGLE



Adjustable Throat, Low Angle

Iron Frame, Polished Sides and Face, Japanned Trimmings, Handy Grip, Endwise Adjustment. The Cutter Rests on its Seat at an Angle of 12 Degrees.



Adjustable Throat

Iron Frame, Polished Sides and Face, Nickel Plated Trimmings, Handy Grip, Endwise Adjustment, Cutter Rests on its Seat at an Angle of 12 Degrees.



Knuckle Joint, Adjustable Throat

Endwise Screw Adjustment, Nickel Plated Trimmings, with Handy Grip.

# IRON BLOCK PLANES

STANLEY DOUBLE END



Double End, Block and Bull Nose

#### STANLEY DOUBLE END ADJUSTABLE



Double End, Block and Bull Nose

Japanned Iron Frame, Polished Face and Sides, Cutter Adjustable Endwise, Handy Grip, Rosewood Knob.

# STEEL BLOCK PLANES



Knuckle Joint Cap, with Handy Grip

Made Entirely of Steel; Practically Indestructible.

# ALUMINUM BLOCK PLANES



Knuckle Joint Cap, with Handy Grip

Aluminum Bottom and Adjustable Front, Steel Lever Cap. An exceptionally light tool that will not rust.

# ADJUSTABLE IRON PLANES STANLEY RABBET AND BLOCK



With Detachable Side

Rosewood Knob with Detachable Side, Nickel Plated Trimmings. Each

The detachable side will easily change this tool from a Block Plane to a Rabbet Plane or vice versa. The cutter is set on a skew and is adjustable endwise.

One in a Box,

# ADJUSTABLE IRON PLANES

STANLEY BULL NOSE RABBET



#### Adjustable Mouth

Japanned Iron Frame, Polished Face.

Each

Very useful for working close up into corners or other difficult places. The mouth can be adjusted for different widths by means of the set serew on top of the plane.

One in a Box.

#### STANLEY SIDE RABBET





No. 9

#### With Depth Gauge

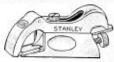
For side rabbeting in trimming dados, mouldings and grooves of all sorts. A reversible nose piece gives the tool a form whereby it will work close up in corners. Fitted with depth gauge.

No. 98—4 in. Long, Right Hand, ½ in. Cutter, Nickel Plated, Rosewood Knob, Weight Each ½ Lb... \$2.20 No. 99—4 in. Long, Left Hand, ½ in. Cutter, Nickel

Plated, Rosewood Knob, Weight Each ½ Lb... 2.20

One in a Box.

#### STANLEY CABINET MAKERS RABBET



# Adjustable Throat, Endwise Screw Adjustment

Iron, Nickel Plated, with "Handy" Feature on the Side which Forms a Convenient Grip for the Hand. Each No. 90—4 in. Long, 1 in. Cutter, Weight Each 1 Lb.. \$4.00

Adapted for fine cabinet or other work where extreme accuracy is desired. It will lie perfectly flat on either side and can be worked with either right or left hand.

This Plane is of the Bull Nose Pattern so that it can be used close up into corners or other difficult places.

One in a Box.

#### STANLEY CARRIAGE MAKERS RABBET



Adjustable Cutters, Rosewood Handle and Knob, Japanned Iron Frame

Especially adapted for the heavy framing required in mining work, or carriage or wagon building, or any other work of similar nature.

# ADJUSTABLE IRON PLANES

STANLEY RABBET



With Adjustable Depth Gauge

Japanned Iron Stock, 8 in. Long, with Spur for Working Acres Grain

Across Grain.		
Nos 190	191	192
Cutter, Inches 1 1/2	1 1/4	1
Weight Each, Lbs 2 1/2	2 %	2
Each	2.80	2.60

These Planes will lie perfectly flat on either side and can be used with right or left hand while planing into corners or up against perpendicular surfaces. They are fitted with a spur and a detachable depth gauge.

One in a Box.

# STANLEY IMPROVED RABBET AND FILLETSTER



Japanned Iron Stock, Two Spurs and Adjustable Depth Gauge

This Plane will lie perfectly flat on either side and has an adjustable fence for regulating width of cut.

It is fitted with two spurs and an adjustable depth gauge. The front part of the plane can be detached for bull nose work. The cutter is adjustable endwise. No. 278-6% in. Long, 1 in. Cutter, Weight Each 2

Lbs. . . . . . . . . . . . . . One in a Box.

STANLEY DUPLEX, FILLETSTER AND RABBET



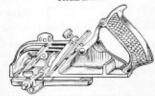
With Adjustable Depth Gauge

Japanned Iron Frame, Adjustable Fence, Detachable Depth Gauge.

No. 78-8 1/2 in. Long, 1 1/2 in. Cutter, Weight Each 

These Planes have two seats for the cutters, one for regular work and the other where a bull nose is required. The adjustable fence can be used on either side and slides under the bottom, regulating the width of the cut. To work same as a rabbet plane, remove fence and arm. One in a Box.

#### STANLEY ALUMINUM DUPLEX FILLETSTER AND RABBET



With Adjustable Depth Gauge

Similar in design to the Regular No. 78 Stanley Iron Plane. Being made of Aluminum it is exceptionally light Each and will not rust.

No. A78-81/2 in, Long, 11/2 in. Cutter, Weight Each 1 1/4 Lbs. . . . . . . . . One in a Box.

# ADJUSTABLE IRON PLANES

STANLEY HANDLED IRON DADO



With Adjustable Depth Gauge

Japanned Iron Stock, 8 in. Long, with Skew Cutters and Two Adjustable Spurs.

Nos	3934	39 %	39 14	39 56
Length, Inches	8	8	8	8
Width, Inches	1/4	3/4	1/4	5%
Weight Each, Lbs	1.%	1.34	1 %	2
Each		3.10	3.30	3.45
Nos		39 %	39 %	391
Length, Inches		8	8	8
Width, Inches		34	7/8	1
Weight Each, Lbs		2	2 14	2 1/4
Each		83.60	3.80	3.95
	ne in a	Box.		

#### STANLEY SCRUB



Round Edge Bit

Japanned Iron Frame, Beechwood Handle and Knob. Each

No. 40-91/2 in. Long, 11/8 in. Cutter, Weight Each .\$2.45 No. 40 1/2 -- 10 1/2 in. Long. 1 1/2 in. Cutter, Weight Each 2½ Lbs..... 3.25

For planing down to a rough dimension any board that is too wide to conveniently rip with a hand saw. Thas is made possible by reason of the peculiar shape of the extra heavy cutter. One in a Box.

# STANLEY EDGE TRIMMING



Japanned Iron Body, English Steel Cutter No. 95-6 in. Long, % in. Cutter, Weight Each 14/4 

For trimming or smoothing the edge of boards for a square or close fit. The cutter works on a skew. Wood blocks of various bevels may be attached enabling the user to make a slanting cut.

One in a Box.

## STANLEY BELT MAKERS



With Adjustable Throat

Japanned Iron Body, Hardwood Handle, Cutter Adjust-

No. 11-5% in. Long, 2% in. Cutter, Weight Each 

This Plane is used for chamfering down the ends of belts before fastening them together.

# ADJUSTABLE IRON PLANES



With Graduated Scale for Setting Face

Japanned Iron Frame, Nickel Plated Trimmings. Each No. 113-10 in. Long, 1 % in. Cutter, Weight Each

curately adjusted for planing the inside or outside of circles. The face is fastened at its center to the plane body, and adjusted at the ends by means of a screw and levers. One in a Box.

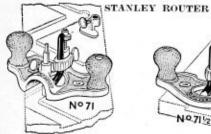
# VICTOR ADJUSTABLE



For Inside or Outside Circles

Black Japanned Finish, Cutters adjustable endwise and sidewise. Center Screw Adjustment with Stop. No. 20-10 in. Long 1% in. Cutter, Weight Each 4

One in a Box.



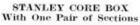


With Two Cutters

For surfacing the bottom of grooves or other depressions parallel with the surface of the work. A wooden bottom of any size can be attached, enabling the user to router on large openings. A 1/4 and 1/4 in, cutter and a patented smoothing cutter furnished with each plane. Each

No. 71—Open Throat, 7½ in. Long, Nickel Plated Beech Handles with Cutters and Attachments for Closing Throat on Narrow Surfaces and Regulat-

One in a Box.



Nickel Plated Iron Frame, Beechwood Handle and Knob.

For making Circular Core Boxes either Straight or Tapered. The Sides of the Plane are at right angles, consequently the point of the Plane will always cut on the circumference of the circle when the sides rest on the edges of the cut.

Adapted for large Core Boxes, working Semi-circles from 1 to 21/2 in. diameter, and with extra sizes up to 5 in. diameter.

No. 57-10 in. Long, % in. Cutter, Weight Each 6% .\$8.65

Per Pair Additional Sides-Each Pair Adding 2 1/2 in. to Diam-

# ADJUSTABLE IRON PLANES

STANLEY DOUBLE END MATCHING



#### Nickel Plated Iron Handles and Body

These Planes have two cutters, a plow, and a tongue tool, both governed by one permanent fence. The tongue tool has one edge wider than the other, which overhangs one side when tonguing on center. Both tongue and groove are cut by working the tool in the same direction, by merely reversing it end for end.

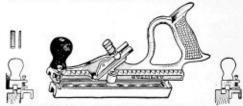
No. 146—Cuts 1/8 in. Groove on 3/8 to 1/2 in. Boards, Centers on 3/8 in., Weight Each 1 1/2 Lbs.....\$4.00 No. 147—Cuts 1/8 in. Groove on 1/2 to 3/4 in. Boards,

Centers on % in., Weight Each 1% Lbs..... 4.25 No. 148—Cuts ¼ in. Groove on % to 1 in. Boards,

Centers on % in., Weight Each 2 % Lbs..... 4.50

One in a Box.

#### STANLEY SWINGING FENCE MATCHING

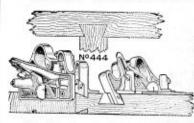


These Planes have two cutters of the same width, and one extra wide cutter. The fence in one setting exposes two cutters for cutting the tongue, and, when reversed, leaves only one exposed for cutting the groove. On thicker boards than the plane works on center, the extra wide cutter is used when cutting the tongue,

Centers on 1/2 in., Weight Each 2 % Lbs..... 5.30

One in a Box.

# STANLEY DOVETAIL TONGUE AND GROOVE



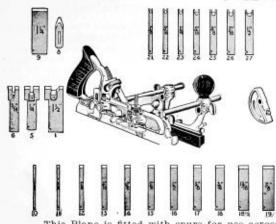
The Only Plane Manufactured That Will Cut a Dovetail.

No. 444-9 in. Long. Nickel Plated, Wt. Each 6 Lbs., \$10.95

It will cut any size grooves and tongues to fit with sides at flare of 20 degrees, where the width of the neck is more than one-quarter of an inch and the depth of groove not more than three-quarters of an inch. The tongue and groove are cut separately and can be made with parallel or tapering sides.

Its compactness is shown in the illustration, where the cut on the left shows the plane assembled for cutting the tongue, and that on the right for cutting the groove. circular containing complete instructions for assembling and operating is packed with each tool.

## COMBINATION PLANES



#### STANLEY PLOW, BEADING, RABBET AND MATCHING

Seven Tools in One, in Compact and Practical Form

No. 45-10 in. Long, Nickel Plated Stock and Fence, Rosewood Handle and Knob, Complete with 23 Cutters as Described Below, Weight Each 91/2 Lbs.... \$15.50 One in a Neat Steel Box, Complete with Cutters.

This Plane embraces in a compact and practical form (1) Beading and Center Beading Plane, (2) Plow, (3) Dado, (4) Rabbet and Filletster, (5) Match Plane, (6) Sash Plane, (7) Slitting Plane.

Each Plane is accompanied by seven Beading Tools (1/8, 3/16)  $\frac{1_4}{4}$ ,  $\frac{1_6}{1_6}$ ,  $\frac{3_6}{8}$ ,  $\frac{1_7}{1_6}$  and  $\frac{1_2}{2}$  in.); Eleven Plow and Dado Bits ( $\frac{1_4}{4}$ ,  $\frac{1_5}{1_5}$ ,  $\frac{1_4}{4}$ ,  $\frac{1_7}{1_6}$ ,  $\frac{3_8}{8}$ ,  $\frac{1_7}{1_6}$ ,  $\frac{1_9}{8}$ One 11/2 in. Sash Tool; Twenty-three Tools in all.

This Plane is fitted with spurs for use across the grain, etc., and can be used either right or left hand. For beading at a distance from the edge of a board attach Cam Rest (see cut at right of plane) to the front arm between the sliding section and fence to prevent the fence sagging. In certain work attach the same to the rear arm to prevent the plane from rocking.

STANLEY ALUMINUM PLOW, BEADING, RABBET AND MATCHING

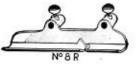
Similar in Design to the Regular No. 45 Plane. Being Made of Aluminum it is an Exceptionally Light Weight Tool that Each Will Not Rust \$18.50 

#### STANLEY HOLLOWS AND ROUNDS



Sold in Sets, Each Set Comprises One Hollow, One Round and Two Cutters.

Nos	6	8	10	12
Cutter, Inches	1/2	5/8	34	1
Works Circles, Inches	34	1	1 1/4	1 1/2
Per Set	\$2.30	2.30	2.50	2.50





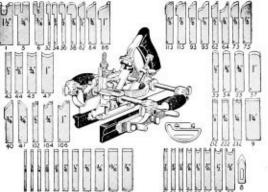
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# STANLEY NOSING TOOL

# For Use on No. 45 Plane Only and Not Included in Price of Plane

This is a specially formed bottom. The tool and its cutter will form what might be called an exaggerated round as in shaping the edges of stair treads. Each No. 5-Nosing Tool with One Cutter..... .81.75

## STANLEY PATENT UNIVERSAL COMBINATION



This tool, in addition to being a Beading Plane, a Plow, Dado, Rabbet Filletster, Match Plane, Sash Plane and a Slitting Plane, is also a Superior Moulding Plane and will accommodate cutters of almost any shape and size.

All parts are interchangeable.

All metal parts of the

planes are nickel plated.

The handles and fence are

made of selected rosewood,

and every part is finished.

No. 55-10 in, Long, Nickel Plated, Rosewood Handles and Fences, Complete with 55 Cutters as Described Below, Weight Each 15 1/4 Lbs..... One in a Neat Steel Box, Complete with Cutters.

The Following Cutters are Furnished with Each Plane

Hand Chamfers.

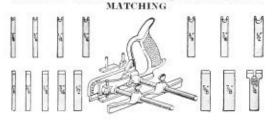
The Plane is fitted with spurs for working across the grain and a special cam rest to be located on the front arm when working at a distance from the edge of the board, to keep the fence from sagging, or on the rear arm on certain

work to prevent the possibility of the plane rocking. All parts are interchangeable.

Note-Catalog and Prices of Extra and Special Cutters for Nos. 45 and 55 Planes Furnished on Request.

Each

# ADJUSTABLE IRON PLANES STANLEY COMBINED PLOW, BEADING AND



#### Complete with 15 Cutters

A small combination plane for light work. Adapted for Plow, Beading, Matching and Rabbet work. Fitted with spurs, depth gauge, and a fence with a 5 in. adjustment,

No. 50-9 1/4 in. Long, Nickel Plated Stock and Fence, 

The cutters comprise 7 plow and dado bits, one each 14, 16, 18, 12, 14, 18 and 16 in., 7 beading tools, one each 18, 16, 14, 16, 38, 18 and 1/2 in, and a 1/4 in, tonguing tool. One in a Box.

#### STANLEY SKEW CUTTER COMBINATION



Complete with 12 Cutters

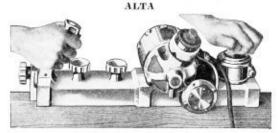
Nickel Plated Stock and Fence, Rosewood Handle and Knob.

For Plow, Dado, Filletster, Matching and Rabbet work. Fitted with spurs, a depth gauge and a fence with Rosewood face.

No. 46-10 1/2 in. Long, Weight Each 5 1/4 Lbs.....\$10.95 The cutters comprise 9 plow and dado bits,  $7_6$ , 14,  $7_6$ , 14, 18, 14, 18, 1a ¼ in. tonguing tool, and a splitting cutter.

No. 47-Without Fence, with %, ½, %, 18, %, 1 14 in. Dado and Slitting Cutter, Otherwise Same as One in a Box.

# ELECTRIC PLANES



#### Ten Times Faster than a Jack Plane

Aluminum Frame, High Speed Steel Blades, Dust-Proof Bearings, Indicator Dial on Front, Adjusting Screw Shows Depth of Cut, Equipped with Universal Motor, Fits Any Light Socket.

No. 1A-Capacity 2 1/2 in. Wide, Adjustable Cut, 

# SCRAPER PLANES STANLEY DOUBLE HANDLE VENEER



#### For Scraping Veneer or for Cabinet Work

The handles are of rosewood with a double grip, and, being placed across the center of the tool, give it a good balance. The blade is adjustable endwise and for angle, and can be firmly locked in position desired.

No. 12-61/4 in. Long, 27/8 in. Cutter, Weight Each Extra Blades ..... One in a Box.

#### With Rosewood Bottom

Japanned Iron Frame, Rosewood Handles, Endwise Adjust-ment. The Blades can be locked at any angle.



Each

No. 1212-614 in. Long, 2 % in Cutter, Weight Each Extra Blades . . . . .50 Extra Rosewood Bottom..... This wood bottom is especially adapted for use on very

fine work, as it renders less liable the possibility of marring or scratching the surface being worked upon. bottom is detachable, and, when worn, can be readily removed and a new one substituted.

One in a Box.

#### STANLEY SINGLE HANDLE



#### Rosewood Handle and Knob

This Plane has the same form as the regular Bailey Plane and is preferred by some users to the double handle Scraper Plane. The blade is adjustable endwise and for angle, and can be firmly locked in position desired.

No. 112-9 in. Long, 2 % in. Cutter, Weight 4 Lbs. . \$4.30 Extra Blades ..... One in a Box.

# FLOOR SCRAPERS

STEARNS

Adjustable cross handle fastened with clamp and wing bolt. allowing user to get against walls and into corners.

6 in. cast iron frame, aluminum finish, 6 in tempered tool steel blade, 38 1/2 in natural finish hardwood handle, 5 in. rubber tired wheels, 56 in. length over

This machine is used by being drawn towards the user. blade is firmly clamped in the scraper, the weight of the machine, resting mostly on the blade, prevents vibration or clatter, and thus

eliminates wavy effects on floor.



Each . \$20.00

# CABINET SCRAPERS



Japanned, Raised Handles, Tool Steel Blade

The blade may be sprung to a slight curve by means of a Thumb Screw giving ease of operation and quickness of cut.

No. 80—11 in. Long. 2 % in. Blade, Weight Each 1 %

STANLEY WOOD FACE



Nickel Plated, Raised Handles, Tool Steel Blade

STANLEY ADJUSTABLE

Handle Can be Fitted to Any Angle

Japanned Iron Frame, Tool Steel Blade, Adjustable Hardwood Handle and Knob, Holds Blades of different forms and widths.

One in a Box. STANLEY SOLID-SET



Particularly Adapted for Floor Work

Extra Blades . . . . . . One in a Box.



Stained Hardwood Handle and Grip, Tool Steel Blade

Has eight sharp cutting edges perfectly ground. Ball Joint Handle, locked or released by a slight turn, can be Locked at any angle.

Each
S1 50

# HAND SCRAPERS

STANLEY

STANLEY Nº 0

No. 0-High Grade English Steel, Special Temper

 Size, Inches
 2x4
 2½x5
 3x4
 3x5
 3x6
 3½x6

 Wt. Dozen, Lbs.
 1½
 2
 2
 2½
 3
 3½x6

 Each
 80.40
 .45
 .40
 .45
 .55
 .55

 Six in a Box.

#### DISSTON HAND



High Grade Steel, Tempered and Polished

 Size, Inches......
 3x4
 3x5
 3x6
 3½x6

 Weight Dozen, Lbs.
 1½
 1¾
 2
 3

 Per Dozen
 \$1.75
 2.00
 2.50
 3.30

#### DISSTON ACME



No. 120—High Grade Steel, Tempered and Polished Ground Even Gauge, Dressed on Edges, Straw Color Finish.

 Size, Inches
 3x5
 3x6

 Gauge, Inches
 16
 16

 Per Dozen
 \$5.50
 5.50

 One-Sixth Dozen in a Box.
 5.50

## TOOTHING CUTTERS



High Grade English Steel, Specially Tempered

For use in Nos. 12, 12 ½ and 112 Scraper Planes. They will do excellent work in scraping off old paint or glue and in roughing up the surface of wood preparatory to veneering.

 Nos.
 28A
 28B
 28C

 Teeth Per Inch
 22
 28
 32

 Each
 80.85
 .85
 .85

 Six in a Box.

# CABINET BURNISHERS



For turning Edges of Cabinet Scrapers, Polished and Hardened Oval Steel Blade, Varnished Hardwood Handle, Brass Ferrule.

No. 1-4½ in. Blade, Weight Per Dozen 3 Lbs.....\$6.00 One Dozen in a Box.

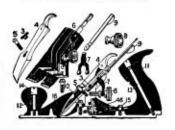
# EXTRA PARTS FOR STANLEY PLANES

# BEDROCK PLANES



No.	Name of No. of Plane	602	603 "c	604 "c	6041/ <sub>2</sub> *c	605 *c	6061/2 "¢	606 "c	607 *c	608 *c
3 4 5	Cap Screw		)							
6 7 8 9	Frog Complete. "Y" Adjusting Lever. Adjusting Nut. Lateral Adjusting Lever Plane Handle.	.10	f	or a	ll r	un	ber	s		
12	" Knob	.30	1							
14	Knob " " " Plane Handle Screw	.20	/		.10	.10	.10	.10	.10	.10
16	Plane Bottom	2.20	2.50	2.50	3.00	3.00	3.20	4.40	6.20	7.00
44 45	Freg Pin	.20	.20	.20	.20	.20	.20	.20	.20	.20
45	Frog Clamping Screw		.10	.10	.10	.10	.10	.10	.10	.10
46	Frog Adjusting Screw	.10	.10	.10	.10	.10	.10	.10	.10	.10

# BAILEY IRON PLANES



No.	Name of Part	No. of Plane	1 2	3 3c	4 4c	41/20	51/4 5 51/4¢5¢	51/2 51/26	6 6c	7 7c	8 8c
3 4 5 6	" " Screw		\$0.10 .50 .10 .70	)							11
7 8 9	"Y" Adjusting L Adjusting Nut. Lateral Adjustin	ever g Lever	.10 .20	f	or a	ıll ı	num	ber	s		
10	Frog Strow										
10 11 12	Frog Strew Plane Handle Knob		.40	1		1					
11 12 13	Plane Handle Knob Handle Bolt and		.30	)							
11 12 13 14 15	Plane Handle	Nut	.20	)		.10	.10	.10	.10	.10	.10
11 12 13 14	Plane Handle Knob Handle Bolt and Knob	Nut	.20	2.00	2.00	.10 2.40	.10 2.40	.10 2.40	.10 3.30	.10 4.70	.10 5.70

# BAILEY WOOD PLANES



No.	Name of No. of Plane	22	24 25 35	26	271/2	28	31	32	36	37
3 4 5 6 7 8	Cap Sorow. Lever Cap Scrow Frog Complete 'Y' Adjusting Lever Adjusting Nut.		) f	or a	all r	nun	nbei	rs		
9 10 11 12 13 14 16 17	Lateral Adjusting Lever Frog Screw and Bushing Plane Handle " Knob Handle Bolt and Nut Knob Screw Plane Bottom Top Casting	.20 .20 .20 .10 .80 .40	.20 .20 .20 .10 .80 .40	.20 .20 .20 .10 1.00	.20 .20 .20 .10 1.00	.20 .20 .20 .10 1.40	.20 .20 .20 .10 1.60	.20 .20 .20 .10 1.70	.20 .20 .20 .10 1.00	.20 .20 .20 .10 1.40

# BAILEY AND STANLEY BLOCK PLANES



No.	Name of No. of Plane	91/4 93/4	15 15½	16 17	18 19	60 60½	62	61 63	65	651/2
1	Single Plane Iron		rices se		700		1			
4	Lever Cap	.20	.20	.30	40	.30	.30	.30	.40	.20 .10 .20
5	" " Screw	.10	.10	.10	.10	.10	.10	10	.10	.10
7	Adjusting Lever	.10	.10	.10	.10	.20	.20	.20	.20	.20
. 8	Adjusting Nut	.20	.20	.20	.20	.20	.20	.20	.20	.20
9	Lateral Adjusting Lever	.20	.20	.20	.20					
11	Plane Handle	.50	.50				.60		10000	
16	Plane Bottom	1.40	1.50	1,50	1.50	1.20	3.50	1.00	1.50	1.50
21	Eccentric Plate	.20	.20	.20	.20	.20	.20	.20	.20	.20
22	Finger Rest Knob	.20	.20	.20	.20	.20	.30	.20	.20	.20

# STANLEY BLOCK PLANES



No.	Name of Part	No. of Plane	100 101	102 103	110	120	130	131	140	203	220
1 4 5 6 8 12 16 18 19	Single Plane I Lever Cap " " Scre Frog Complete Adjusting Nut. Plane Knob. Plane Bottom Detachable Sig Side Screw (P:	w	.20	.40	.20 .20 .50	.20 .30 .20 .60	.20 .20 .70	.20 .10 .30 .20 .30 1.40	.30 .10 .20 .20 .30 1.50 .50	.20 .10 .20 .20 .30 .50	.20 .10 .20 .20 .30 .60

# READY EDGE PLANE BLADES

#### STANLEY

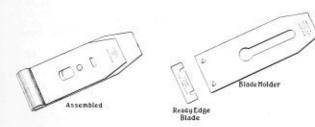
These Blades assure a sharp cutting edge. Whenever an old blade becomes dull a new one can be quickly substituted.

Stanley Ready Edge Blades are furnished with Special Double Plane Irons in the 1 %, 2 and 2 % in, sizes for use on the regular Stanley Bailey, Bed Rock and Aluminum Planes.



Ready Edge Blade and Double Iron in Position.

Stanley Ready Edge Blades are attached by screws to specially constructed blade holders. A plane iron cap of special design fits over this and is held in place by a cap screw. Thus assembled it can be applied for use in the Regular Stanley Bailey, Bed Rock and Aluminum Planes.





Display Carton

Size 6 1/2 in. Long, 7 in. Wide. Contains 6 Individual Boxes Four of 2 in. Size, One Each 1% in. and 2% in.



Individual Box (2 in. Size), 6 in. Long, 2 1/4 in. Wide.

Contains 1 Double Iron Blade and 5 Small Cutters.



Small Package of Blades Contained in Each Edge Double Iron Ready Box.

Each Display Carton-Containing 6 Blades and 6 Sets of Ready Edges .....\$12.00

Individual Boxes-Containing 1 Blade and 1 Set of

Ready Edges, Furnished 1 %, 2 or 2 % in. Wide for Use on Regular Stanley or Bed Rock Planes. \$2.00

Ready Edge Blades-5 Edges for Use with Patent Blade Holder, Furnished 1 %, 2 or 2 % in. Wide.

These Ready Edge Plane Bits save time and money for the mechanic. A sharp edge is always ready for use.

# PLANE IRONS

#### BAILEY SINGLE



For "Bed Rock" and "Bailey" Iron and Wood Planes Width, Inches ...... 1 1/4 1 36 2 Each ..... .55 .60 .65 216 Width, Inches ..... 214 2 36 2 54 80.70 Each ..... .75 .80 .80

#### Numbers of Planes Each Plane Iron Will Fit

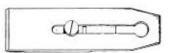
14 in. for Plane No. 1.

in. for Plane Nos. 2, 2C, 602, 602C.

- 1 % in. for Plane Nos. 3, 3C, 5 4, 5 4 C, 20, 22, 25, 113, 603, 603C.
- in. for Plane Nos. 4, 4C, 5, 5C, 9, 24, 26, 35, 604, 604C, 605, 605C.

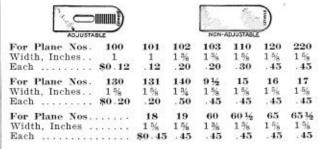
- $2\,\%$  in. for Plane Nos. 10, 10 ½, 10 ½, 2 ½ in. for Plane Nos. 5 ½, 5 ½ C, 27 ½, 605 ½, 605 ½ C.
- 2 % in. for Plane Nos. 4 ½, 4 ½ C, 6, 6C, 7, 7C, 11, 28, 31, 36, 604 ½, 604 ½ C, 606, 606C, 607, 607C.
- 2 % in, for Plane Nos. 8, 8C, 32, 37, 608, 608C.

#### BAILEY DOUBLE



For "Bed Rock" and "Bailey" Iron and Wood Planes Width, In... 1¼ 1½ 1¾ 2 2½ 2½ 2½ 2½ 2½ Each ..... \$0.80 .90 1.00 1.10 1.15 1.20 1.25 1.30 All Above, Six in a Box.

#### STANLEY AND BAILEY BLOCK



# CUT PLANE IRONS

BUCK BROS. SINGLE



No. 59—Forged from Highest Grade Cast Steel Width, In... 1% 2 214 214 236 21/2 Per Dozen . . \$6.65 7.65 8.00 9.00 10.00 10.60 12.00

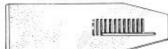
#### BUCK BROS, DOUBLE



No. 60—Forged from Highest Grade Cast Steel Width, In . . 134 2 21/4 21/4 23/4 21/4 Per Dozen. . \$12.60 14.00 14.60 16.00 17.60 18.70 20.50

# PLANE IRONS

SIEGLEY SINGLE



Cast Steel, Polished, for Siegley Iron Planes Width, Inches..... 2 234 234 236 Each ..... \$1.00 1.10 1.20 1.25 Six in a Box.

BUCK BROTHERS TOOTH



Forged from Highest Grade Cast Steel Made in three Cuts, Fine, Medium and Coarse. Width, Inches ..... 214 Per Dozen \$12.00 13.50 Note-Always state Cut required when ordering.

# COMMON WOOD PLANE HANDLES





No. 197. Per Dozen No. 195-Jack No. 197-Fore . . . . . . . . . 3 . 36 One Dozen in a Box.

#### JOINTER GAUGES MILLERS FALLS



For Wood or Iron Planes Black Enameled Iron, Flat Surface Nickel Plated.

No. 88-9 in. Long, Weight Each 21/4 Lbs... Adjustable to any bevel. Can be attached to any wood or iron Jack, Fore or Jointer Plane, and enables the operator to accurately plane bevels of any desired angle or to make even joints without using a Try Square or Bevel. One in a Box.

STANLEY



Enables the workman to plane bevels of any angle between 30 and 90 degrees. or to square up the edges of boards with extreme accuracy. A Hole is bored in each end of the Gauge so that a Wood Face of

any desired size may be attached, thus providing a bearing surface longer or wider than the face of the gauge itself.

No. 386-For Iron Planes, Iron and Steel Construction, Nickel Plated, Weight Each 21/4 Lbs..... 82.35 One in a Box

#### CHISEL GRINDERS STANLEY

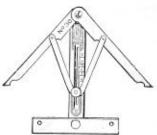
For Grinding Cutters and Chisels

Tools may be ground to any de-sired bevel. The tool to be sharpened is rigidly held in the grinder by thumb screws.

No. 200 - All Metal, Nickel Plated, Weight Each 1% One in a Box.



#### ANGLE DIVIDERS STANLEY



Iron Body, Pressed Steel Arms, Full Nickel Plated

Each No. 30-Length Over All 7 % in., Length of Arms 6 in., Length of T Head 4 in., Weight Each 11% Lbs. . . . . . . . . . . . . . \$2.20

Designed for bisecting or dividing any angle, and for fitting mouldings or other woodwork into odd angles.

One in a Box.

## SLIDING T BEVELS STANLEY WOOD HANDLE

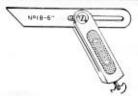


No. 25—Rosewood Handle

Blued Steel Blade, Brass Tipped Handle, Flush Brass Lever Adjustment.

Length Blade, In . . . . . 14 Length Handle, In . . . 8 1/4 10 % Weight Dozen, Lbs... 2 1/2 3 1/4 4 16 5 % Per Dozen ...... \$7.20 8.40 8.40 10.20 9.60 One-half Dozen in a Box.

#### STANLEY METAL HANDLE



No. 18—Nickel Plated Handle and Blade

Thumb Screw Adjustment, Prevents Slipping.

Length of Blade, Inches. 10 Length of Handle, Inches 5 1/8 6 14 Weight Per Dozen, Lbs. 4 % 13.80 15.00 One-half Dozen in a Box.

# STAIR GAUGE FIXTURES STARRETT



For Use with Carpenters Steel Squares

A pair of these fixtures can be readily clamped to a carpenter's steel square to form a gauge for various uses. Sketch A shows the gauge as applied for laying out a stair stringer; Sketch B, laying off hexagon angles; Sketch C as used as a Center Gauge or in quartering a circle. These fixtures are light, neat, efficient and low priced.

Per Pair No. 111—Fixtures ..... One Pair in a Box.

# TRY SQUARES

#### STANLEY ROSEWOOD HANDLE



No. 20-Blued Steel Blade, Rosewood Handle, Brass Face Plate

Edges of Blade Accurately Machined. Square Inside and Out. Graduated in 8ths of an inch.

Length Blade, Inches	4 12	6	7 32	9
Length Handle, Inches	3 1/2	4 %	5 %	6
Weight Each, Oz	4 1/3	5 1/3	7.2%	9.25
Per Dozen	\$6.60	8.40	9.00	12.00
Length Blade, Inches	10	12	15	18
Length Handle, Inches	6	7	8 1/4	9 3/4
Weight Each, Oz	1.0	12 1/3	18	20 1/2
Per Dozen	\$12.60	15.60	19.80	27.00

One-half Dozen in a Box.

#### STANLEY IRON HANDLE



# TRY AND MITRE SQUARES

#### STANLEY ROSEWOOD HANDLE



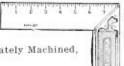
No. 2-Blued Steel Blade, Rosewood Handle, Brass Face Plate

Square Inside and Out, Graduated in 8ths of an inch.

Length Blade, Inches	6	7 36	9
Length Handle, Inches	4	5	5 34
Weight Each, Oz	6	7.9%	1.0
Per Dozen		11.40	13.80
One-half	Dozen in	a Box.	

#### STANLEY IRON HANDLE

No. 1-Nickel Plated, Steel Blade, Square Inside and Out



Edges of Handle and Blade Accurately Machined, Graduated to 8ths of an inch.

Length Blade.	Inches 6	8
Length Handle	. Inches 4	5
Weight Each.	Oz 7 ½	8 1/2
Per Dozen	\$9.60	11.40
	One-half Dozen in a Box.	

FOX



Per Dozen No. 6-6 in. Blade, Graduated 8ths, 4 1/4 x1 3/8 in. Head, Square Inside and Out, Weight Per Dozen 5 Lbs......\$2.50

One-half Dozen in a Box.

# MITRE TRY SQUARES

FOX COMBINED SQUARE AND MITRE



All Steel, Nickel Plated, Electric Welded

Simple, Accurate and Durable, Graduated in 8ths of an No. 3-10 in. Long, Weight

Six in a Box.

#### STANLEY ADJUSTABLE

No. 21-For Carpenters

Useful for doing Short Work about Windows, Doors, in putting on Butts or Locks, or as a Depth or Marking Gauge, High Grade Nickel Plated Steel Blade and Cast Iron Head, Blued Adjusting Screws,

Blade Graduated in 8ths, 16ths and 32nds of an inch, Square Inside and Out.

Length Blade	, Inches	6	9	12
Length Head	Inches	2 %	3 1/8	3.5%
Weight Each	i, Oz	6	8	12
Each		\$1.00	1.20	1.40
	One in	a Box.		

#### LUFKIN UNIVERSAL

#### No. 65L-For Carpenters

Marked on Both Sides, one Edge 8ths, other Edge 16ths inches.

This Square consists of accurately graduated Steel Blade with Figures and The second second Lines to show distinct, fitted

with movable head which can be secured at any point, combining in one tool a Try and Mitre Square, a Level, a Plumb. a Marking Gauge, Height and Depth Gauge and Separate

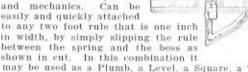
Length, Inches 9	12
Weight Each, Oz	18
Each \$1.35	1.50
One in a Box.	

# 3-ANGLE RULE TOOL

#### STANLEY

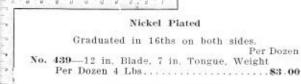
All Metal, Nickel Plated Each No. 2-Weight Each 3 Oz .... \$0.90

A light, handy little Pocket Tool for carpenters and mechanics. Can be easily and quickly attached



may be used as a Plumb, a Level, a Square, a T Square, a Mitre Square, a 30 Degree Square, a Depth Gauge or a Marking Gauge. One in aBox.

# HANDY STEEL SQUARES

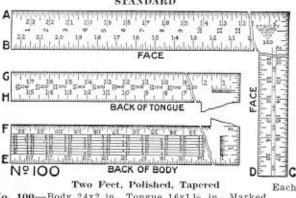


One Dozen in a Package.

Each

# STEEL SQUARES

STANDARD



	Two Feet, Polished, Tapered	Each
No.	100-Body 24x2 in., Tongue 16x1 1/2 in., Marked	
	1/2, 1/4, 1/2, 1/4, 1/4, 1/4, 1/4, 1/4, 1/4, 1/4, Essex Board and 8 Square Measure	82.80
No.	3—Body 24x2 in., Tongue 16x1½ in., Marked 18, 1/2, 1/4, Brace and Essex Board Measure	
No.	14—Body 24x2 in., Tongue 16x1½ in., Marked ¼, ¼, Essex Board Measure	2.25
	Two Foot, Blued Steel with White Figures, Tanere	d

	Each
No.	100B-Body 24x2 in., Tongue 16x1 1/2 in., Marked
	\$2, \$\frac{1}{10}\$, \$\frac{1}{12}\$, \$\frac{1}{10}\$, \$\frac{1}{8}\$, \$\frac{1}{4}\$, \$\frac{1}{100}\$ Brace, Essex Board
	and 8 Square Measure
No.	3B-Body 24x2 in., Tongue 16x1 1/2 in., Marked
	16. 1/12. 14. Brace and Essex Board Measure 3.10
No.	14B-Body 24x2 in., Tongue 16x1½ in., Marked
	1/4, 1/4, Essex Board Measure 2.85
	Two Foot, Coppered Steel, White Figures, Tapered

									Each
No.	100C-	Body	24x	in.	. Tongu	e 16x1	1/4 in	Marked	
	12, 16,	1/12.	14,	1/100	Brace,	Essex	Board	and 8	
	Square	Mea	sure	٠.					83.80

Two Foot, Nickel Plated, Tapered

No.	100N-Body 24x2 in., Tongue 16x1 1/2 in., Marked
	12, 16, 1/12, 1/10, 1/8, 1/4, 1/100 Brace, Essex Board
	and 8 Square Measure
No.	3N-Body 24x2 in., Tongue 16x1 1/2 in., Marked
	1s, 1/12, 14, Brace and Essex Board Measure 3.00
	Weight Each 21/2 Pounds

		" CIBITE I	such a /4	Lounds		
		18 Inch,	Polished,	Tapered	1	Each
No.	18-Body					rked
	18, 312, 18	in				\$2 . 25

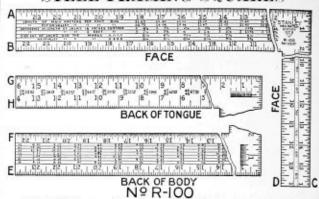
	18 Inch, Blued, Tapered Each	
No.	18N-Body 18x1 1/2 in., Tongue 12x1 in., Grad-	
	uated 16, 1/12, 1/8 in	
	Weight Each 14 Pounds.	

	One Foot, Polished, Tapered E.	acl
No.	10-Body 12x1 1/2 in., Tongue 12x1 in., Marked	
	1/12, 1/8 and 1/4 in	.70
No.	12—Body 12x1½ in., Tongue 12x1 in., Marked	
	fe, 1/12, 1/8, 1/4 in	. 95
	Weight Each % Pound.	
	All Above Squares, Three in a Box.	

#### ALUMINUM SQUARES STANLEY TWO FOOT



# STEEL FRAMING SQUARES



With Rafter or Framing Brace, Octagon, Essex Board Measure and 1/100ths Scale With Rafter or Framing, Brace and Essex Board Measure No. R3-Polished, Body 24x2 in., Tongue 16x1 1/2 in., 

With Patent Rafter Table, Brace Measure and Table for Hip, Valley, Jack and Cripple Rafter No. 503R-Polished, Body 24x2 in., Tongue 16x1% Weight Each 2 1/4 Pounds.

All Above Squares, Three in a Box

## ALUMINUM FRAMING SQUARES STANLEY TWO FOOT



### STEEL TAKE-DOWN SQUARES SOUTHINGTON

With Cam Lock

One piece solid steel. Tongue fits in an undercut socket designed to give maximum strength and resistance together with perfect accuracy and alignment.

The members are locked by a cam lock. which is easily turned with a small tool or a

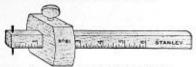
In putting the square together the tongue is inserted in the slot and pushed into place when the tongue is seated. Cam is locked and the square is ready for use. There are no keys or springs to get out of order.

No. TD101-Polished, Body 24x2 in., Tongue 16x1 1/2 in., with Rafter Table, Essex Board, Brace and Octagon Measure and  $\frac{1}{100}$  Scale, Marked  $\frac{1}{32}$ ,  $\frac{1}{10}$ ,  $\frac{1}{10}$ ,  $\frac{1}{10}$ ,  $\frac{1}{10}$ ,  $\frac{1}{10}$  and  $\frac{1}{4}$  in., Weight Each  $2\frac{1}{4}$  Lbs. . . . No. TD101B-Blued, Otherwise Same as No. TD101. 7.10

One in a Water Proof Case.

# GAUGES

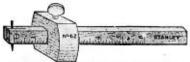
#### STANLEY MARKING



Fixed Steel Marking Point

Square Beechwood Head, Oval Beechwood Bar, Boxwood Thumb Screw.

Per Dozen



Adjustable Steel Marking Point

Square Beechwood Head, Oval Beechwood Bar, Boxwood Thumb Screw.

Per Dozen



Brass Thumb Screw and Shoe

Round Brass Plated Boxwood Head, Oval Beechwood Bar, Highly Polished, Adjustable Steel Marking Point. Per Dozen



Brass Thumb Screw and Shoe

Square Brass Plated Boxwood Head, Oval Beechwood Bar, Highly Polished, Adjustable Steel Marking Point.



With Circular Face Plate

Square Brass Plated, Boxwood Head, Oval Beechwood Bar, Highly Polished, Adjustable Steel Marking Point. Per Dozen

The brass plate with two convex faces attached to one side of head permits a gauge line being run with steadiness and accuracy around curves of any degree, either concave or convex. The head is reversible and flat side used for ordinary work.

One-half Dozen in a Box.

## GAUGES

# STANLEY MORTISE AND MARKING



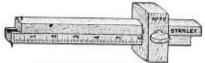
# Plated Head, Brass Thumb Screw

Highly Polished, Double Oval Beechwood Bars, Oval Brass Plated Beechwood Head, Brass Shoe, Fixed Steel Marking Points.

Has two independent bars working in the same head.

One pin is affixed to each bar. One side of the mortise is marked and the gauge 'urned over for the other mark.

One-half Dozen in a Box.



#### Plain Head, Boxwood Screw

# STANLEY SLIDE MORTISE AND MARKING



# Highly Polished Rosewood, Brass Slide

Has a brass slide working in the wood bar. One of the marking points is affixed to one end of the slide, the other to the end of the bar itself. These points mark both sides of the mortise at the same time.

One-half Dozen in a Box.

#### STANLEY METAL BAR MARKING



#### Pin Point and Roller Cutter

Nickel Plated Steel Bar, with Adjustable Point, Double Faced Brass Plated Rosewood Head, Brass Screw.

# STANLEY METAL BAR MORTISE AND MARKING



#### Pin Point and Roller Cutter

Nickel Plated Steel Bars, with Adjustable Points, Double Faced, Brass Plated Rosewood Head, Brass Screws.

Per Dozen

## GAUGES

#### STANLEY METAL MARKING



#### With Adjustable Pin Point

Nickel Plated Steel Bar, Nickel Plated Iron Head.

No. 90-61/2 in. Long, Bar Marked 16ths, Weight Each 4 Oz......\$0.70 One in a Box.



#### With Adjustable Point and Roller

Nickel Plated Steel Bar, Nickel Plated Iron Head.

No. 97-61/2 in. Long, Bar Marked 16ths, Weight Each 8 Oz ..... One in a Box.

# STANLEY METAL MORTISE AND MARKING



#### With Adjustable Pin Points

Nickel Plated Steel Bars, Nickel Plated Iron Heads. Each No. 91-61/2 in. Long, Bar Marked 16ths, Weight Each 8 Oz.... One in a Box.



#### With Adjustable Pin Points and Roller

Nickel Plated Steel Bars, Nickel Plated Iron Heads.

No. 98-61/2 in. Long, Bar Marked 16ths, Weight Each 10 Oz......\$1.65 Gauges equipped with the additional roller cutters are particularly adapted for marking cross grain lumber.

One in a Box.

# PANEL GAUGES

STANLEY



Adjustable Point

Beechwood, Polished, Boxwood Screw.

Each No. 85-17 1/2 in. Long, Weight Each 8 Oz........ \$0.45 Twelve in a Box.



#### Adjustable Point

Rosewood, Polished, Brass Thumb Screw and Face Plate.

No. 85 1/2 -- 20 1/2 in. Long, Weight Each 15 Oz. . . . . . \$3.35 These Gauges are used for marking door panels and such wide work where an extra long bar is needed. They have extra wide head that is rabbeted to prevent slipping.

Three in a Box.

# BUTT GAUGES

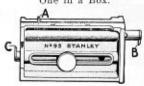
STANLEY



For Rabbeted Jambs or Nailed Strikes

No. 93-21/2 in. Long, Nickel Plated Steel Head, Brass Slide, Graduated 16ths for 2 inches, Weight Each ¼ Lb......\$1.55

Has two cutters on the same end of a sliding bar, designed so that at one setting one cutter will mark the location of butt on door, and the other the location of the butt on the casing, allowing the necessary clearance. A gauge at the opposite end of the tool can be set for the thickness of butt both on casing and door,



#### For Rabbeted Jambs

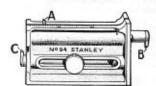
Each

Each

No. 95-3 in. Long, Nickel Plated Iron Body, Steel Bars, Graduated 16ths for 2 inches, Weight Each 

Has one bar with two steel cutters fixed upon it. When the cutter at the outer end of this bar is set for gauging on the edge of the door, the cutter at the inner end of the bar is already set for gauging from the back of the jamb. The other bar has a steel cutter to accurately gauge for the thickness of the butt.

One in a Box.



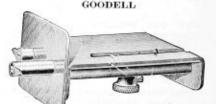
For Rabbeted Jambs or Nailed Strikes

Nickel Plated Iron Body, Steel Bars.

No. 94-3 in. Long, Graduated 16ths for 2 inches, 

For rabbeted jambs, Cutter A marks from the jamb in the rabbet. Cutter B from the edge of the door engaged Cutter C the thickness of butt for nailed strikes. Cutter B when reversed marks for the butt on both door and jamb. Cutter C the thickness of the butt.

One in a Box.



# Steel, Nickel Plated

This Tool is designed especially for door hanging and mortise work. It is provided with three hardened double edge Spurs, the one on the back of the double end bar being adjustable for the regulation clearance.

Each No. 227-3 1/2 in. Long, Weight Each 8 Oz........\$1.75

# WOOD LEVELS



No. 102—Polished Hardwood Stock, Brass Top Plate Plain Side Views, Proved Glasses, Handy Finger Grips, 2 3 x 1 4 in. Stock.

2 % x1 ¼ in. Stock.				
Length, Inches	10	12	14	16
Weight Each, Lbs	3/4	7/8	1	1 1/8
Each	\$0.80	. 80	. 90	. 90
No. 102A-Assorted 10 to 16	in., Weight	Per	Dozen	
11 Lbs	I	er D	ozen, \$	10.50
One Dozen	in a Box.			

# PLUMBS AND LEVELS



 No. 104—Polished
 Hardwood
 Stock,
 Brass
 Top
 Plate

 Plain
 Side
 Views,
 Proved
 Glasses,
 Handy
 Finger
 Grips,

 2 %x1 ¼
 in.
 Stock.
 12
 14
 16
 18

 Length,
 Inches
 1
 1½
 1
 1½

 Weight
 Each
 81
 20
 1
 20
 1
 25
 1
 25

No. 104A—Assorted 12 to 18 in., Weight Per Dozen 12 Lbs. . . . . . . . . . . . . . . . . Per Dozen, \$15.00 One Dozen in a Box.



No. 00—Polished Hardwood Stock, Brass Top Plate Plain Side Views, Proved Glasses, Handy Finger Grips. 3 1/4 x1 1/6 in. Stock.

 Length, Inches
 18
 20
 22

 Weight Each, Lbs
 1 \( \frac{3}{4} \)
 2
 2 \( \frac{1}{4} \)

 Each
 \$1.60
 1.60
 1.65

 No. 06A—Assorted 18 to 22 in., Weight Per Dozen

 16 \( \frac{1}{2} \) Lbs
 Per Dozen in a Box.



No. 0—Polished Hardwood Stock, Brass Top Plate Plain Side Views, Proved Glasses, Handy Finger Grips, 24 v1 % in Stock

3 % x1 % in. Stock. 24 26 Length, Inches ..... 28 30 2 16 Weight Each, Lbs..... \$1.75 1.75 2.00 2.00 No. 6-A-Assorted 24 to 30 in., Weight Per Dozen ..... Per Dozen, \$23.50 One-half Dozen in a Box.

#### STANLEY ADJUSTABLE



No. 3—Polished Hardwood Stock, Brass Tips and Top Plate Plain Side Views, Proved Glasses, Handy Finger Grips, 3 1/4 x1 3/4 in. Stock.

 3 ½ x1 ¾ in. Stock.

 Length, Inches
 24
 26
 28
 30

 Weight Each, Lbs
 2 ½
 2 ¾
 3
 3 ¼

 Each
 \$2.80
 2.80
 2.90
 2.90

 No. 3A—Assorted
 24
 to 30 in., Weight Per Dozen

Adjustable Levels have the level glass set in plaster in a metal case. This case is fixed at one end by a screw which holds the plate firmly against a collar. The other end of the level is held against the spiral spring by a screw which permits its being adjusted. The top plate is entirely independent of the setting thus preventing tampering with adjustment.

# PLUMBS AND LEVELS

STANLEY ADJUSTABLE



No. 5—Three-Ply Polished Hardwood Stock, Brass Top Plate

Brass Tips and Lips, Plain Side Views, Proved Glasses, Handy Finger Grips, 3 1/4 x1 3/4 in. Stock.

 Length, Inches
 24
 26
 28
 30

 Weight Each, Lbs
 2 %
 3
 3 ½
 3 ½

 Each
 \$3.75
 3.75
 4.00
 4.00

 Per Dozen

# STANLEY DUPLEX ADJUSTABLE



No. 30—Polished Hardwood Stock, Brass Tips, Top Plate and Discs

Plain Side Views, Proved Glasses, Handy Finger Grips, 3 1/8 x 1 % in. Stock.

 Length, Inches
 24
 26
 28
 30

 Weight Each, Lbs
 2 \( \frac{3}{4} \)
 3
 3 \( \frac{4}{4} \)
 3 \( \frac{1}{2} \)

 Each
 83.75
 3.75
 4.00
 4.00

 Per Dozen

These Levels have the ordinary form of leveling glass set in the top surface of the stock, for use where observation sidewise may be found convenient, an additional leveling glass is set in the side, at the opposite end of the plumb, Both glasses are protected by brass discs, can be seen from either side.

One-half Dozen in a Box.

#### STANLEY BRASS BOUND ADJUSTABLE



No. 93—Polished Selected Mahogany Stock, Brass Top Plate Plain Side Views, Heavy Brass Bound Edges, Solid Brass

 Tips on Ends, Proved Glasses, Handy Finger Grips, 3 ½ x1 % in. Stock.

 Length, Inches
 24
 26
 28
 30

 Weight Each, Lbs
 2 ¾
 3
 3 ¼
 3 ½

 Each
 \$4.60
 4.80
 5.00
 5.25

 One in a Box.

# STANLEY BRASS BOUND SMALL STOCK ADJUSTABLE



#### No. 1093—Polished Selected Mahogany Stock, Brass Top Plate

 Plain Side Views, Heavy Brass Bound Edges, Solid Brass Tips on Ends, Proved Glasses, Handy Finger Grip, 3½x1¾ in, Stock.
 12
 18

 Length, Inches
 1½
 1¾
 1¾

 Weight Each, Lbs
 \$2.70
 3.30

One in a Box.
STANLEY IMPROVED



#### No. 257-Extra Quality Light Wood

 Length, Inches
 24
 26
 28
 30

 Weight Each, Lbs
  $1\frac{1}{8}$   $1\frac{1}{4}$   $1\frac{3}{8}$   $1\frac{1}{2}$  

 Each
 \$2.70
 2.70
 2.80
 2.80

 One in a Box.

## PLUMBS AND LEVELS

STANLEY IMPROVED



#### No. 260-Polished Cherry Stock

Length, Incl.	nes	24 28
Weight Eac	h, Lbs	134 234
Each	\$	1.00 4.10
	V- 001 With Manufact	m Tine

#### No. 261—With Aluminum Tips

Length, I	nches			24	28
Weight 1	Each,	Lbs	:	1 7/8	2 3/8
Each				1.35	4.50
37.	000	Almandan	Donad and	A learn beauty	PPG

#### 

# ALUMINUM PLUMBS AND LEVELS

STANLEY ADJUSTABLE



# No. 237—Light in Weight, Will Not Rust or Warp

Polished Aluminum Frame, Milled and Ground Top and Bottom, Nickel Plated Trimmings, Proved Glasses, Two Plumb and One Level Glass Set in Metal Cases with Revolving Protecting Cover.

Length, Inches	12	18	24
Weight Each, Lbs	1	1.1/4	1 3/4
Each	\$4.00	5.00	6.00
One in	a Box.		

#### STANLEY IMPROVED



#### No. 232-With Four Plumbs and Two Levels

Aluminum Truss Frame, Proved Glasses Protected by a Heavy Glass Cover, Will Plumb or Level Either Side Up. Length, Inches...... 24 26 28 30

#### SANDS ADJUSTABLE



#### With Two Plumbs and Two Levels

High Grade Aluminum, Strong and Light, Protected Glasses, Will Plumb or Level Either Side Up.



#### With Four Plumbs and Two Levels

High Grade Aluminum, Strong and Light, Protected Glasses, Will Plumb or Level Either Side Up.

	26	28	30
24	26	28	3.0
2 1/2	2 14	2 14	2.34
1 1/4	1 1/6		11/4
2	2 1/4	2 1/9	2
6.40	6.70	7.00	7.50
	2 ½ 1 ⅓ 2	2 ½ 2 ¼ 1 ⅓ 1 ⅓ 2 2 ¼ 66.40 6.70	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

# MASONS PLUMBS AND LEVELS

SAND

# 

#### Will Plumb or Level Either Side Up

#### SAND BRASS BOUND MASONS

# 

#### Will Plumb or Level Either Side Up

Four Plumbs, 2 Levels, 2 Hand Holes, Protected Glasses, Brass Lined and Brass End Plates.

#### PEERLESS



No. 7—Seven Piece Mahogany and White Pine Glued Together with Water-Proof Glue, Two Levels and 4 Plumbs, Protected Glasses, Used Either Side Up.

Length, Inches 42	48
Weight Each, Lbs 2 1/4	2 3/4
Each \$7.50	8.00
Three in a Carton.	



#### No. 40-Brass Bound

Two Levels and 4 Plumbs, Protected Glasses Used Either Side Up.

 Length, Inches
 42
 48

 Weight Each, Lbs
 3
 3½

 Each
 \$6.50
 7.50

 Three in a Carton.

# 

# No. 3-White Pine, Red Water-Proof Finish

Two Levels and 4 Plumbs, Protected Glasses, Brass End Plate, Used Either Side Up.

 Length, Inches
 42
 48

 Weight Each, Lbs.
 2
 2 ½

 Each
 \$4.50
 5.00

 Three in a Carton.

#### STANLEY



#### Extra Quality Light Wood

One Double Level, Four Plumbs, Six Proved Glasses. Used Either Side Up. Each No. 252—48 in. Long, 2¼ in. Wide, Weight Each

#### SANDS ALUMINUM



# With Four Plumbs and Two Levels

High Grade Aluminum, Strong and Light, Protected Glasses, Will Plumb or Level Either Side Up. Each

# METALLIC PLUMBS AND LEVELS



No. 36G-With Grooved Bottoms

Japanned Body, Nickel Trimmings, Adjustable, Prooved Glasses. Groove in Bottom Permits Use of the Level on Shafting in addition to its use as a Regular Level. Length, Inches ..... 12 24 9 6 7/8 114 1 36 Weight Each, Lbs. . . . 3.70 3.30 \$1.90 2.30 2.75 Each ..... One in a Box.

# STANLEY IMPROVED ADJUSTABLE



No. 37G-With Grooved Bottoms Nickel Plated Iron Body, Nickel Trimmings, Adjustable

Ground Glasses, Eclipse Case Cover, Two Plumbs. 12 Length, Inches ..... 1 % 4 1/4 Weight Each, Lbs..... \$3.70 4.45 5.15 Each ..... Groove in bottom permits use of the level on shafting in addition to its use as a regular level,

The Eclipse Cover is an outer shell or tube fitting over the level case, which can be turned either to expose the level glass when in use, or to protect it when not in use.

#### One in a Box. STARRETT



No. 132-With Double Plumb

Grooved Bottoms, Graduated Vials, Black Enamel Fin-The 4 to 12 in. have Square Ends. The 18 and 24 in. Sizes are Furnished with Concave Ends. Concave 6 9 74 1 14 12 Length, Inches ..... 4 1 34 2 34 34 Weight Each, Lbs.... .. \$1.65 1.80 2.00 2.10 3.00 3.50 One in a Box.

# STARRETT ENGINEERS AND PLUMBERS



With Grooved Bottom

The Hinged Tube inside the frame contains a level glass and is adjusted to a graduated scale and shows any incline by 32nds (or less) to 2 inches to the foot. A fixed level and plumb in addition makes this a practical tool for all olace of work

Class of work.	Plain Vial		Ground Vial	
NosLength, InchesWeight Each, Lbs	133A 10 1 % \$3.75 One in a	133B 15 2 % 4 . 00 Box.	133C 10 1 1 % 7 . 00	133D 15 2 % 7 . 25

# IRON BENCH LEVELS STARRETT IMPROVED ADJUSTABLE





Style of 6 and 8 inch.

Style of 12 inch.

For Testing Shafting Japanned Iron Base, Nickel Plated Trimmings.

oupasses	No. 97-With Pla	in Vial	70.20	
Length, Inches		8 2.75	$\frac{12}{4.00}$	*18 6.00
	No. 98-With Grou	md Vial	12	*18
Length, Inches		= 00	7 00	10.00

\*The 18 inch size is furnished with double plumbs. In addition to the regular parallel vial, the bases have a cross level which enables one to place or hold the base on a shaft level in its cross section, not canted sidewise, for the shape of a level glass is such that though true as adjusted on a flat surface, it will not be reliable when canted One in a Box. sidewise.

#### LEVELS STANLEY ECLIPSE ADJUSTABLE MACHINISTS



#### No. 34G-With Grooved Bottoms

For Work on Shafting, Piping, etc. Iron Base, Nickel Plated, Ground Glass, Revolving Glass Protector.

Length, Inches	6	8	10
Weight Each, Lbs	3/4	1 1/8	1 34
Each	\$2.10	2.80	3.10
One in	a Box.		

#### STANLEY MACHINISTS IRON



#### Nickel Plated

	Irc	on Case,	, Proved Level (		
				381/2 39	1/2
				2 14 4 2	34
Weight	Each,	Oz		m /4	95
			Six in a Box.	\$0.75	,,,

#### STARRETT POCKET



Japanned Iron Base, Proved Glass Each No. 130-3 1/2 in. Long, Weight Each 3/4 Lb. . . . . . . . . 80.60

# One in a Box. STANLEY HEXAGON POCKET



No. 31-Nickel Plated Metal Case, Proved Level Glass.

	2	214	3	3 14
Length, Inches	-	- 72		1 34
Weight Each, Oz	3/4	78	1 1/4	
	80.45	.50	.60	. 75
Each				
Six in a	Box.			

#### STANLEY STRAIGHT EDGE



#### Brass Top Plate

Japanned Iron, Proved Glass.

Can be attached to any straight edge or carpenters'

square. Twelve in a Box.

#### CROSS TEST LEVELS STARRETT



Levels in Both Directions Each

No. 136-Japanned, Size 2 3/4 in., Weight 

As the cut shows, two levels are united in one frame, extending at right angles 2% in. each When placed on work to be leveled in both directions, it will not be necessary to move the One in a Box. tool.

# STRAIGHT EDGE LEVELS

ROE



#### Aluminized Steel

Quickly Detachable and Adjustable to Any Straight Edge. Especially Adapted for Masons, Carpenters or Plumbers Use. Fitted with Colored Level Glasses.

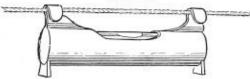
No. 25-Plumb and Level 5 % x3 ¼ in. with 2 Glasses . . . . . . . . \$24.00 No. O1—Level Only 3 1/2 x2 1/2 in, with 1 Glass..... 12.00 One in a Box.

## LINE LEVELS STARRETT ALUMINUM



For Laying Foundations, Road Building, Etc. No. 108-3 in. Long. % in. Diameter, Weight 1/2 Oz. 80.60 One in a Box.

#### SIMPLEX



For Use on Line or Bench

Stamped from Sheet Aluminum, Weighs Only One-Quar-The Extension Lugs are Ground to Permit Level to be Used on Flat Surfaces. Per Dozen No. 201-2 1/4 in. Long, Weight Each 1/4 Oz.......86.00 One Dozen on Display Card.

#### LEVEL GLASSES STANLEY PROVED



#### Extra Thick Tubing

Marked at Crowning Point by Two Indelible Lines. Length, Inches ..... 1 1 14 1 14 134 Weight Dozen, Lbs.... Per Dozen . . . . . . . . . . . \$1.20 1.20 1.20 1.20 Length, Inches ..... 2 1/2 3 1/2 3 Weight Dozen, Lbs.... 1.20 1.80 1.80 One Dozen in a Box.

# LEVEL SIGHTS

STANLEY

Iron, Gun Metal Finish For Sighting Level for One Given Point to Another a Distance Away. Per Pair

No. 1—For Wood Levels, Weight Per Pair 4 Oz. . \$1.25 No. 2—For Iron Levels, Weight Per Pair 4 Oz. . . 1.25 One Pair in a Box.

# LEVELING STANDS

STANLEY



#### For Holding Level with Sights Attached

Consists of Base and Rotating Level Carrier. Attached by Set Screw (A) to one stake. Base is provided with 3 Wings (H) for attaching to Tripod Legs. The Adjusting Screws (C) provide Adjustment when Base is used on Flat Surfaces. The Swivel may be locked by Knurled Screw (F) under Center Screw (G) holds Level

on the Swivel. All parts of the Stand are made of Metal. Nickel Plated.

No. 38-For Metal Levels, Weight Each 2% Lbs. 83.15 No. 48-For Wood Levels, Weight Each 2 1/2 Lbs. . 3.15 One in a Box.

# PLUMB BOBS

TRON



# Japanned Iron, Adjusted Top

Nos. . . . . . . . . . 1 1 14 Wt. Each, Oz .. 18 Diameter, Inches 11/2 1 % 2 14 Per Dozen ..... \$2.40 4.50 5.70 6.30 No. 1, One Dozen; Balance, One-half Dozen in a Box.

#### SARGENT

# Nickel Plated Iron, Adjusted Top

N28 N30 N31 Weight Each, Oz ..... 6 1.2 18 Each ..... \$0.36 .43 .57 No. N28, Ten in a Box; Nos. N30 and N31, Five in a Box.



#### STARRETT MERCURY No. 87-Nickel Plated

Knurled Steel Body, Filled with Mercury, Hardened Point, Complete with Braided Silk Line.

Length, Inches ..... 5 4 Weight Each, Oz.... 3 1/2 6 12 16 

Fitted with a patented device for fastening the string. One in a Box.

# BRASS

# With Screw Top

Cast Brass, Lead Filled, Steel Point.

. . . . . . . . . . . . . . . . 6 Weight Each, Oz..... 11 14 Each ..... \$1.25



#### SURVEYORS Adjustable Top

16

1.40

Machined from Solid Brass Bar, Steel Points Screwed in. Lacquered Finish.

50B 50C 50D 50E Weight Each, Oz..... 4 8 12 16 24 Each ..... \$1.00 1.55 2.10 2.80 4.20



One-half Dozen in a Box.



## LEVELING INSTRUMENTS





For Attaining Angles in Horizontal Plane Only For contractors, farmers, masons, etc. Light weight and

has a wide range of work.

The upper plate is connected to the tripod head by a ball and socket joint, and is leveled by the leveling screws. This plate is recessed to contain a graduated arc for taking angles, and on the plate is the frame with level and sight tube for taking horizontal angles only. The nickel plated sight tube on this instrument is plain, with no lenses, 12 in, long, with small eye aperture and the usual cross wires.

No.	101A-With Plain Sight Tube, Long Legs and
	Plain Level Vial
No.	101B-With Plain Sight Tube, Long Legs and
1000	Ground Level Vial 16.75
No.	101C-With Telescope, Long Legs and Ground
	Level Vial 25.00
Iron	Target-Without Pole

#### STARRETT TRANSIT



Furnished in Wood Carrying Case

The instrument is composed of iron and brass, and consists of a tripod, to the head of which is connected by a ball-and-socket joint an upper plate which can be leveled by the leveling screws.

The plate is recessed to contain a graduated arc for taking horizontal angles. This arc is ½ of a circumference, reading 90° each side of 0, and being independent of level and sight tube can be turned and used at any point of a complete circle. On this plate rests a triangular frame to which are attached a level, a graduated arc for taking vertical angles, graduated 45° each side of 0, and a sight tube. The plain sight tube has no lenses, is brass, 12 inlong; in one end is a small eye aperture, in the other the usual cross wires.

The telescope has cross lines, is adjustable to distances, and is same size and length as plain sight tube. The lens is well protected from dirt and breakage by a friction cap, and a shutter for the eye aperture.

With short legs, as shown in the cut, the instrument is 8 in. high. With long extension legs, which fasten on over the short legs, the height can be adjusted from 2 ft. 8 in. to 4 ft. 8 in. The sight tube, level case, and graduated arcs are nickel plated, the other parts are japanned. Each No. 99B—With Plain Sight Tube, Long Legs and

 No.
 99B—With Plain Sight Tube, Long Legs and Plain Level Vial.
 \$20.00

 No.
 99F—With Telescope, Long Legs and Ground Level Vial
 40.00

 Iron Target—Without Pole
 1.50

WHITE IMPROVED DUPLEX



A Low Priced Combination Level-Transit

Polished brass telescope 10 in. long. Drawer eyepiece. Fixed cross hairs, ten diameters achromatic lens system showing objects upright, provided with index lock permitting release into tilting position up to 45° above or below horizon. Bronze adjustable standards. Silvered brass circle 4½ in. diameter, divided by 360° in quadrants, revolving under arm. Bronze leveling head. Three point type bearing surface.

#### UTILITY FARM LEVEL



For Contractors, Road Builders and Farmers

The sturdiest, most compact, and most practical instruments of its kind ever put on the market. It has a 10 in. telescope with adjustable eye piece, fixed cross hairs, ten diameter achromatic lens system, horizontal circle graduated to degrees, index arm, four leveling screws and spirit level.

#### LEVELING INSTRUMENTS

#### WHITE CONTRACTORS DUMPY LEVEL



These instruments will be found very serviceable for Millwrights, Architects, Mason Contractors and Builders, also for Drainage Contractors for tile draining and other operations where lines are to be run with stations but a short distance apart.

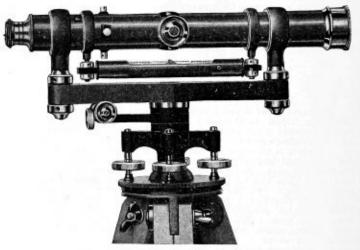
Especially designed to meet the growing demand for a level selling at a moderate price, but still possessing the essential characteristics of the higher priced "Y" level. The telescope is 12 inches long with magnifying power 25 diameters. Aperture of objective lens 1½ inches. Horizontal circle 4½ inches in diameter and graduated from 0 to 90 degrees each way, with vernier reading to 5 minutes. The circle can be set at zero at any given point. Center extra long and well tapered, and made of hard bell metal. Telescope of fine definition, and the objective lens is focused by rack and pinion of improved make. Improved eye-piece for precise focusing of the cross-hairs. Telescope yokes of

best composition metal, permanently fixed, thus insuring greater stability. This instrument, unlike the "Y" level, has very few adjustments and when once adjusted it stays adjusted a longer period of time. Tripod is made of best seasoned hardwood. A metal trivet having three sharp points, for placing the level on any surface of wood or stone, is furnished with each instrument. Level vial is extra long, carefully ground and graduated on the glass. Instrument packed erect, ready for use, in polished hardwood box with strap, containing full directions for use, together with screw capped plumb bob, sun shade, dust cap and adjusting pins.

#### WHITE ROAD BUILDERS LEVEL

This recently designed Instrument has instantly met with the approval of road builders throughout the United States and Canada and is without exception the finest Level of its class on the marke.

The telescope is 12 inches long with magnifying power 25 diameters. Aperture of objective lens 1 1/4 inches. Center extra long and well tapered and made of hard bell metal. Telescope of fine definition, objective lens focused by rack and pinion of improved make. Improved eye-piece for precise focusing of the cross-hairs. Telescope yokes of the best composition metal, permanently fixed, thus insuring great stability. This instrument, unlike the "Y" level, has very few adjustments and when once adjusted stays adjusted a long period of time. Tripod is made of best seasoned hardwood. A metal trivet having three sharp points, for placing the level on any surface of wood or stone, furnished with each instrument. Level vial is extra long. carefully ground and graduated on the glass. Instrument packed erect, ready for use, in polished hardwood box with strap, containing full directions for use, together with screw capped plumb bob, sun shade, dust cap and adjusting pins.



No. 2036.

# LEVELING INSTRUMENTS

#### WHITE IMPROVED CONVERTIBLE



No. 2020.

The "White" Convertible Level, a combination Level and Transit, is an instrument indispensible for the speedy and accurate performance of every known building operation. It is especially recommended to Architects, Contractors and Builders, Millwrights and Drainage Engineers, Mason Contractors and Landscape Gardeners, Grading Contractors and Road Engineers.

and pinion movement to object slide, spiral movement to eye-piece. Cross hairs, sun-shade and dust-cap. Range 5 feet to one mile. Lenses of finest quality, level to telescope 4 in. long, housed in tube with protection bridge, graduated on the glass and ground to a sensitiveness of 60 sec, of arc to 1/10 in. motion of bubble.

Cross-Bar and Wyes-Cross-bar and standards are cast integral and heavily ribbed and strengthened. Wyes (one of which is adjustable) are of improved design with lock-nuts for locking yokes, dispensing with old style pin bolts. One wye yoke is provided with stop insuring true position of cross-hairs when leveling. Cross-bar and standards are constructed of steel-like bell metal. Convertible standards provided with two brass straps which hold telescope firmly in the trunnions when in transit position.

Circle-4 1/2 in. diameter with eight reinforced spokes, divided to degrees numbered 0-90 in quadrants and reading by vernier to 5 minutes. Circle is movable for the purpose of setting same at zero at any given point and provided with a set-screw.

Leveling-Head-Improved design, heavily ribbed, with clamp and tangent screw. Four leveling screws with shoes. Center extra long and constructed of hard bell-metal. Shifting center.

Regular Equipment-Solid leg tripod with iron shoes and protection cap to head. Bolts provided with wing nuts for tightening by hand. Polished hardwood carrying case with strong lock and strap. Six-ounce plumb-bob, trivit (for foundation work), sun-shade, and adjustable pins. Full instructions for use with each level.

Finish and Weight-Instrument is finished in rich olive alligatorite with small parts in bright gold, making a very tasty and durable finish.

Each

#### Special Features of White Improved Convertible Levels

- (1) The cross-bar is drop-centered and cast integral with standards. (Patented.)
- (2) Spirit level glass always rests safely below telescope out of harm's way, whether used as level or transit.
- (3) No loose attachments to fasten on by means of thumb screws. Nothing to get out of order or adjustment. Always accurate. Always dependable.
- (4) Extra fine and powerful telescope (25 diameter power). Extra large objective lens (11/4 in. aperture). Extra long telescope (12 in.)
- (5) Only ten seconds are required to change instrument from an accurate level to an equally accurate transit. Standards, which accommodate telescope when in transit position, do not interfere when instrument is used as a level; in fact, they serve as a protection to spirit level glass.

(6) Shifting center. No. 2020—Complete with Tripod, Case and Accessories, Weight 15 Lbs.... \$ 95.00

No. 2021-Same as No. 2020, but with Vertical Arc Divided to Degrees Numbered 0-40 Each Way and Reading by Vernier to 5 Minutes.... 105.00

In Place of Regular Equipment, Both Levels, No. 2020 and No. 2021, May be Furnished with the Following Options:

- (A) Compass attached to instrument, of suitable accuracy for building work.
- (B) Heavy split leg tripod in place of regular solid leg tripod.
- (C) Heavy extension leg tripod, in place of regular solid leg tripod.

(E) Fixed stadia hairs reading 1 foot in 100 feet on any rod.



No. 2021.

#### DRAWING KNIVES

SWAN REGULAR



No. 1480—Razor Blade

Solid Crucible Steel Blade, Heavy Steel Caps and Ferrules, Polished Hardwood Handles, Length Blade, Inches. . 6

Weight Dozen, Lbs... 16 17 Per Dozen ...... \$13.50 13.50 19 21 15.60 18.00 One-half Dozen in a Box.

#### SWAN CARRIAGE MAKERS



Beveled on Both Sides

Solid Crucible Steel Blade, Heavy Steel Caps and Ferrules, Polished Hardwood Handles. Per Dozen No. 7482-8 in. Blade, Weight Per Dozen 16 Lbs. . \$12.00 One-half Dozen in a Box.

#### BUCK BROS.



Solid Forged Steel Blade, Black Finish, Nickel Plated Steel Ferrules and Caps, Polished Hardwood Handle.

Per Dozen No. 71 1/2 -8 in. Blade, Weight Per Dozen 16 Lbs... \$18.50 One-half Dozen in a Box.

#### PEXTO FOLDING



No. 10-Forged Steel Blade Handles Adjustable to Four Different Positions,

Length, Inches . . . . . . . . . . . . . . 8 10 19 % 30.50

# One-half Dozen in a Box. SWAN LINEMENS



No. 7485-Heavy Crucible Steel Blade For Linemens Use and Other Heavy Work.

Length Blade, Inches... 10 Weight Per Dozen, Lbs... 30 12 14 33 36 21.60 25.20 One-half Dozen in a Box.

# DRAWING KNIVES

BUCK BROS, AMATEUR



No. 71-Straight Blade

Forged Steel Blade, Polished, Nickel Plated Ferrules, Polished Applewood Handle. Length Blade, Inches..... Weight Dozen, Lbs..... 10 Per Dozen ...... \$21.00 One-half Dozen in a Box.

#### PEXTO PONY



Razor Blade

Crucible Steel and Norway Iron, Round Ebonized Handles, Heavy Ferrules, Handles are Set at 45 Degrees.

Per Dozen No. 4-4 in. Polished Blade, % in. Wide, Weight Per

#### CORNERING TOOLS STANLEY

For Rounding Sharp Edges

Special Tool Steel, Nickel Plated used by Pattern Makers and Wood workers.

	W	
- 1		
	28	29
	14-1/8	$y_{17}^{2} - 14$
	5.14	5.16

Length, Inches ..... Weight Each, Oz..... 

These Tools have a different size cutter at each end and their form is such that no depth gauge is required. One-half Dozen in a Box.

#### BLIND NAIL TOOLS STANLEY



Nickel Plated Steel

This tool can be attached to a 1/4 in. Chisel and permits a shaving of any desired thickness to be raised for blind nailing or inlaid work.

Per Dozen No. 96-2 1/4 in. Long, Weight Per Dozen 1 Lb.....\$4.80 One-half Dozen in a Box.

#### SPOKE SHAVES REGULAR WOOD



Plain Face

Polished Hardwood, Cast Steel Blades, 39 Length Blade, Inches. 2 3 216 2 3 1/2 Weight Dozen, Lbs.. 3 31/4 Per Dozen ...... 811.00 12.00 3 34 5 13.00 13.00 One-half Dozen in a Box.

NARROW BLADE WOOD



Polished Hardwood, Cast Steel Blades Per Dozen No. 49F-Flat Face, 11/2 in. Blade, Weight Per

1 Lb. . . . . . . . . . . . . . ...... 11.00 One-half Dozen in a Box.

#### SPOKE SHAVES STANLEY ADJUSTABLE

Has a lever cap fastening the cutter in such a manner as to bring an even pressure on the cutter edge.

The cutter can be quickly adjusted both endwise and sidewise by means of the adjusting screws which engage the slots near the end.



Side and End Adjustment



Side and End Adjustment

Japanned Iron Handles, Cast Steel Cutters, Straight Handles.

Per Dozen

No. 152—10 in. Long, 2 % in. Cutter, Weight Each

These Spoke Shaves have a cutter and cap iron fastened by thumb screw in such a manner as to bring an even pressure on the cutter edge, and at the same time allow adjustment without the use of a screw driver.



Double Iron

Japanned Iron Handle, Cast Steel Cutter, Straight Bottom, Raised Handles, Easily Adjusted without the Use of a Screw Driver.

Per Dozen No. 51—10 in. Long, 2½ in. Cutter, Weight Each



Double Iron

Japanned Iron Handle, Cast Steel Cutter, Straight Bottom, Straight Handles, Easily Adjusted without the Use of a Screw Driver.

Per Dozen
No. 52—10 in. Long, 21/8 in. Cutter, Weight Each

12 Oz. \$6.60
No. 55—With Hollow Face. 6.00
Extra Cutters 1.80



Two Cutters

Has two cutters and separate cutter seats, one hollow and one straight. The two forms of cutters in one tool make it a very handy spoke shave.

All Above, One-half Dozen in a Box. STANLEY RABBET



Straight Handles

Japanned Iron Handles, Cast Steel Cutters. Per Dozen

# SPOKE SHAVES

BAILEY IRON



Adjustable Mouth

Japanned Iron Handles, Cast Steel Cutters, Raised Handles,

By means of a thumb screw the mouth can be opened or closed as coarse or fine work may require.



Adjustable Mouth

Japanned Iron Handles, Cast Steel Cutters, Straight Handle. By means of a thumb screw the mouth can be opened or closed as coarse or fine work may require.

#### BAILEY LIGHT



Double Iron

Japanned Iron Handles, Cast Steel Cutter, Straight Handle, Straight Bottom, Cutter and Cap Iron Fastened by a Thumb Screw,

Per Dozen

#### BAILEY EXTRA LIGHT



Straight Handles

Designed especialy for use in Manual Training Schools, or for any work requiring the use of an extra light Spoke Shave.

#### BAILEY ADJUSTABLE CHAMFER



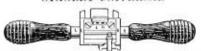
Raised Handles.

 Japanned Iron Handles, Cast Steel Cutters.
 Can be Adjusted to Chamfer Up to 1½ Inch.
 Per Dozen

 No. 65—9½ in. Long, 1½ in. Cutter, Weight Each
 11 Oz.
 \$10.80

 Extra Cutters
 1.80

#### All Above, One-half Dozen in a Box. STANLEY UNIVERSAL



With Detachable Bottoms and Width Gauge Nickel Plated Metal Parts, Rosewood Handles, Cast Steel

No. 67—9 ¼ in. Long. 1 % in. Cutter, Weight Each 
¾ Lb. 

Extra Cutters 
40

Complete with Two Detachable Bottoms, One for Straight Work, the Other for Circular Work.

The handles are detachable, and either one can be screwed in the top of the stock, enabling the user to work into corners or panels.

One in a Box.

# STANLEY EVERLASTING CHISELS



The Head, Shank and Blade are of patented construction, having the head, shank and blade forged from one piece of tool steel, as shown in the cut above.

This construction insures great strength and durability and provides for a maximum of efficiency, as a blow on the head of the Chisel is transmitted directly to the cutting edge. Great care is used in the manufacture, especially in the heat treatment of the blade.

The Handle is made from selected hickory and is well finished and fits very snugly into the ferrule. A leather washer is placed between the handle and the steel head to serve as a cushion, thus relieving the handle from shock when the blow is struck.

The Ferrule is machined from bar steel and is assembled to the Chisel by swaging the ferrule into the double taper in the shank, practically making the shank and ferrule one piece.

The cutting edges are ground sharp before leaving the factory.

#### FIRMER



No. 20—Beveled Edge

Extra Quality Tool Steel Blade, 5 1/2 inches Long.

Width, Inches Length Over All, Inches Weight Dozen, Lbs Per Dozen	1114	11 34		1114
Width, Inches Length Over All, Inches Weight Dozen, Lbs Per Dozen	111/4	111/4		1 11 ¼ 8 ½ 20 . 40
Width, Inches Length Over All, Inches Weight Dozen, Lbs Per Dozen	12 1/4 10 1/2 \$22 . 20	12 ¼ 12 25.20	$1\frac{34}{12\frac{14}{4}}$ $13$ $27.60$	$\begin{array}{c} 2 \\ 12 \frac{1}{4} \\ 15 \frac{1}{2} \\ 30.60 \end{array}$

One-half Dozen in a Box.

#### POCKET



No. 40-Beveled Edges

Extra Quality Tool Steel Blade, 41/2 inches Long.

Width, Inches Length Over All, Inches Weight Dozen, Lbs Per Dozen	3 34	14 9 4 13.80	% 9 4 ½ 15.00	16 9 5 15.60
Width, Inches Length Over All, Inches Weight Dozen, Lbs Per Dozen	9 5 1/4	34 9 5 ½ 16.80	76 9 6 17.40	1 9 6 1/4 18 . 00
Width, Inches	10 ¼ 9 \$16.80	1 1/2 10 1/4 10 22 . 80 a Box.	$\begin{array}{c} 134 \\ 104 \\ 114 \\ 24.00 \end{array}$	$2 \\ 10 \frac{1}{4} \\ 13 \frac{1}{4} \\ 27.00$

BUTT

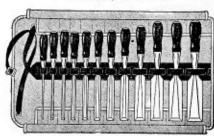


No. 50—Beveled Edges

Extra Quality Tool Steel Blade, 3 inches Long.

Extra Quanty 1001 8	steel Blac	ie, s inc	nes Lon	g.
Width, Inches Length Over All, Inches Weight Dozen, Lbs Per Dozen	8 3 %	34 8 4 13.20	% 8 4 1/4 14 . 40	14 8 4 1/2 15 · 00
Width, Inches	8 4 %	34 8 5 15.60	76 8 5 14 16 . 80	1 8 5 % 17 . 40
Width, Inches Length Over All, Inches Weight Dozen, Lbs Per Dozen	9 8	136 9 9 21.60	$\begin{array}{c} 1\frac{34}{9} \\ 10\frac{1}{2} \\ 22.80 \end{array}$	$\begin{array}{c} {\bf 2} \\ {\bf 9} \\ {\bf 12} \\ {\bf 25.80} \end{array}$

#### FIRMER, IN SETS

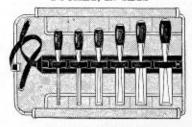


In Brown Canvas Roll

Per Set

One Set in a Box.

#### POCKET, IN SETS

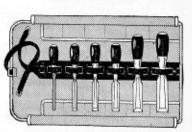


In Brown Canvas Roll

Per Set

No. 210 Set—Consists of Nine No. 40 Beveled Edge Pocket Chisels, One Each 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 1, 1 1/4 and 1 1/2 in., Weight Per Set 4 3/4 Lbs... 13.80 One Set in a Box.

#### BUTT, IN SETS



# CHISELS

#### SWAN SOCKET FIRMER



No. 1010-Plain Edges

Solid Crucible Steel Blade 6 1/2 in. Long. Selected Hickory Handle. Width, Inches ...... Weight Dozen, Lbs..... 36 3 1/2 4.16 5 12.50 Per Dozen ..... \$12.50 12.50 12.50 Width, Inches 34 1 6 1/2 7 1/2 Weight Dozen, Lbs..... 8 Per Dozen ..... \$14.00 14.50 16.00 16.50 1 34 2 Width, Inches . 1 1/2 15 14 22.00 23.00 One-half Dozen in a Box.

#### SWAN SHORT SOCKET FIRMER



No. 1035 34 -Beveled Edge, Leather Capped Handle

Solid Crucible Steel Blade, 4  $\frac{1}{2}$  in. Long, Selected Hickory Handle.

Width, Inches Weight Dozen, Lbs Per Dozen	2 1/2		3 3 14.00	3/2 4 14.00
Width, Inches	4 1/2	34 5 16.00	78 6 18.00	$\frac{1}{7}$ 18.50
Width, Inches	\$20.50	22.00	24.00	$\begin{array}{c} 2 \\ 10 \frac{1}{2} \\ 25 \cdot 00 \end{array}$

Add \$1.20 Per Dozen Net for Beveled Edge. One-half Dozen in a Box.

# CHISELS IN SETS

SWAN SOCKET FIRMER



In Fancy Wood Boxes

Equipped with Brass Springs for Holding Chisels in Place. Made of Hardwood and Varnished. Per Set No. 6112—Set, Consists of Twelve No. 1010 Socket Firmer Chisels, One Each ½, ¼, ¾, ½, ½, ½, ¼, ¼, 1, 1¼, 1½, 1¾, and 2 in., Weight Per Set 10 Lbs. \$16.70

No. 61512—Set, Consists of Twelve No. 1035 Beveled Edge Socket Firmer Chisels, One Each ½, ¼, ¾, ½, ½, ¼, ¾, 1, 1¼, 1½, 1¾, and 2 in. 18.50

#### CHISELS

#### BUCK BROS, SOCKET FIRMER



No. 36—Beveled Edges, Leather Tipped Handle

Extra Cast Steel, Ground Sharp. The 1 in. Chisel has 5 ½ in. Blade. Selected Hickory Handle,

Width, Inches. 36 34 38 34 56 34 Wt. Dozen, Lbs. 4 35 5 34 5 34 7 34 8 8 34 Per Dozen . . . . \$18.20 18.20 18.20 19.60 20.60 22.20

Width, Inches. 78 1 134 134 134 2
Wt. Dozen, Lbs. 10 114 13 15 16 17
Per Dozen . . . . \$23.40 24.60 28.20 30.40 35.60 39.40
One-half Dozen in a Box.

#### SWAN SOCKET BUTT



No. 1035 1/2 -- Beveled Edge, Leather Capped Handle

Solid Crucible Steel Blade,  $3 \ \%$  in. Long, Selected Hickory Handle.

Width, Inches. 14 1/2 34 1 11/4 11/2 Wt. Dozen, Lbs. 31/2 4 41/2 55/8 6 63/4 Per Dozen . . . \$14.00 14.00 16.00 18.50 20.50 22.00 Add \$1.00 Per Dozen Net for Beveled Edges.

One-half Dozen in a Box.

#### BUCK BROS. TANGED BUTT



#### No. 3-Plain Edge

Solid Crucible Steel Blade, 3 ¼ in. Long, Tempered and Polished Plain Applewood Handle.

#### BUCK BROS. TANGED BUTT



No. 4—Beveled Edges

Extra Quality English Cast Steel, Blade 3 4 in. Long, Tempered and Polished, Fancy Applewood Handle.

Width, Inches.  $\frac{14}{4}$   $\frac{36}{36}$   $\frac{14}{2}$   $\frac{96}{36}$   $\frac{34}{4}$   $\frac{76}{4}$  Wt. Dozen, Lbs.  $\frac{2}{4}$   $\frac{1}{2}$   $\frac{3}{2}$   $\frac{3}{2}$   $\frac{3}{2}$   $\frac{3}{2}$   $\frac{4}{4}$   $\frac{4}{4}$   $\frac{1}{4}$  Per Dozen . . . . \$12.20 12.20 13.20 14.00 14.60 15.00

#### CHISEL ROLLS



	Brown Canvas			Each	
Vo.	6R-To	Hold	6	Chisels	.\$1.00
io.	12B-To	Hold	12	Chisels	. 1.50

### CHISELS

#### BUCK BROS. HANDLED TANG FIRMER



No. 2—Plain Edges

Extra Quality English Cast Steel, Tempered and Polished, Applewood Handles, Heavy Polished Brass Ferrules, Blade of 1 in. Chisel is 5½ in. Long from Bolster.

14 Width, Inches. . 36 Wt. Dozen, Lbs. 2 % 3 1/4 3 4 1/4 4 1% Per Dozen .... \$8.00 8.00 8.00 8.80 9.60 10.40 Width, Inches. . 1 1/4 1 1/2 1 34 0. 5 1/2 Wt. Dozen, Lbs. 5 1/4 10 36 8 1/2 Per Dozen . . . . \$11.40 12.00 15.60 18.80 22.40 26.20 One-half Dozen in a Box.

#### BUCK BROS. HANDLED TANG FIRMER



No. 30—Beveled Edges

Extra Quality English Cast Steel, Tempered and Polished, Fancy Applewood Handles, Heavy Polished Brass Ferrules, Blade of 1 in. Chisel is 5½ in. Long from Bolster.

These Chisels are particularly adapted for Manual Training Work and are furnished as standard equipment for practically all schools. They are also recommended as a practical and high grade tool for the man who wants a good chisel for home use.

One-half Dozen in a Box.

#### BUCK BROS. HANDLED PARING



#### No. 32—Beveled Edges

Extra Quality English Cast Steel, Tempered and Polished, Fancy Applewood Handles, Heavy Polished Brass Ferrules, Blade of 1 in. Chisel is  $8\,\frac{1}{2}$  in. Long.

Width, Inches. . 38 Wt. Dozen, Lbs. 3 14 3 1/4 3 1/2 Wt. Dozen, Lbs. Per Dozen . . . . \$17.60 17.60 17.60 18.00 19.40 20.40 Width, Inches. . 134 11/2 2 Wt. Dozen, Lbs. 10 11 14 17 Per Dozen .... \$21.40 23.60 30.40 34.80 41.00 47.00 One-half Dozen in a Box.

#### BUCK BROS, BENT SHANK HANDLED PARING



#### No. 1514-Beveled Edges

Extra Quality English Cast Steel, Tempered and Polished. Applewood Handles, Heavy Polished Brass Ferrules, Blade of 1 in, Chisel is 8 ½ in, Long.

34 Width, Inches. . 1/8 Wt. Dozen, Lbs. 3 1/2 4 1/2 6 1/2 5 1/2 4 5 Per Dozen . . . . \$25.60 25.60 25.60 26.20 28.80 30.60 1 17. 10 ½ Width, Inches.. 7% 1 Wt. Dozen, Lbs. 7½ 8½ 1 1/4 1 1/2 1 34 Wt. Dozen, Lbs. 1116 14 16 1736 Per Dozen .... \$32.20 36.40 46.80 54.40 64.00 72.20 One-half Dozen in a Box.

# CHISELS

SWAN SOCKET FRAMING



No. 1013—Beveled Back Crucible Steel Blade, 8 in. Long, Polished Hickory Han-

#### One-half Dozen in a Box. SWAN SOCKET CORNER



No. 7014—Extra Quality

# CARPENTERS SLICKS



| No. 1012 ½ — Oval Back | Crucible Steel Blade 9 in, Long, Polished Maple Handles. | Width, Inches | 3 | Weight Dozen, Lbs | 54 | Per Dozen | S72.00 | One-quarter Dozen in a Box.

#### GOUGES SWAN SOCKET FIRMER



#### No. 1210-Outside Bevel

Crucible Steel Blade, 6 1/2 in. Long, Polished Hickory Handle. Width, Inches . . 4 5 4 1/2 3 Wt. Dozen, Lbs. 5 1/2 Per Dozen . . . . \$14.00 14.00 14.00 15.00 15.50 16.50 Width, Inches. . 38 1 134 134 1 % 2 7 1/2 Wt. Dozen, Lbs. 8 10 16 12 14 15 Per Dozen . . . . \$18.00 19.00 21.50 24.00 26.00 30.00 One-half Dozen in a Box.

#### BUCK BROS. HANDLED FIRMER



No. 8-Outside Bevel

Extra Quality English Cast Steel, Tempered and Polished, Applewood Handle, Heavy Polished Brass Ferrules. The Blade of the 1 in. Chisel is 5 ½ in. Long from the Bolster. Ground Sharp.

Width, Inches. . 1% Wt. Dozen, Lbs. 1% 3 3 % 2 4 1/4 5 Per Dozen . . . . \$11.20 11.20 11.20 11.80 12.80 13.80 Width, Inches . . 76 1 1 34 1 1/2 1 34 2 Wt. Dozen, Lbs. 5 1/4 6 8 9 14 11 Per Dozen . . . . \$15.20 15.80 20.60 24.60 29.00 34.40 One-half Dozen in a Box.

# GOUGES

BUCK BROS, HANDLED TANG FIRMER



No. 10-Inside Bevel

Extra Quality English Cast Steel, Tempered and Polished, Applewood Handle, Heavy Polished Brass Ferrule, Blade of 1 in. Chisel is 5½ in. Long. Width, Inches. . 36 34 38 Wt. Dozen, Lbs. 134 2 3 3 34 Per Dozen . . . . \$12.80 12.80 12.80 13.60 14.20 15.40 1 1 34 1 14 1 1/2 Width, Inches. Wt. Dozen, Lbs. 5 1/4 6 8 50 11 14 Per Dozen .... \$16.60 17.40 22.40 26.20 31.00 36.40 One-half Dozen in a Box.

#### BUCK BROS. HANDLED PARING



No. 14-Inside Bevel Extra Quality English Cast Steel, Tempered and Pol-

ished, Applewood Handle, Heavy Polished Brass Ferrule, Blade of 1 in. Chisel is 81/2 in. Long. Made in Three Blade of 1 in. Uniser is Sweeps, Regular, Middle and Flat. Per Dozen .... \$20.40 20.40 20.40 21.00 21.80 24.40 Width, Inches.. 78 1 114 Wt. Dozen, Lbs. 7 8 10 1 1/2 134 2 Wt. Dozen, Lbs. 11 14 1.7 Per Dozen . . . . \$25.40 28.60 35.80 41.00 49.20 56.60

#### One-half Dozen in a Box. BUCK BROS. BENT SHANK PARING



No. 151/2 -Inside Bevel

Extra Quality English Cast Steel, Tempered and Polished, Applewood Handles, Heavy Polished Brass Ferrules, Made in Three Sweeps, Regular, Middle and Flat. The 1 in. Blade is About 8 1/2 in. Long.

Width, Inches. 36 34 36 32 Wt. Dozen, Lbs. 34 34 34 44 5 36 Per Dozen .... \$24.60 24.60 24.60 27.00 29.20 30.80

Width, Inches.  $7\frac{1}{2}$  1 134 132 134 2 Wt. Dozen, Lbs.  $7\frac{1}{2}$  832 1032 1132 1134 1732 Per Dozen . . . . \$32.00 35.40 44.00 49.00 56.00 64.40 One-half Dozen in a Box.

#### SWEEPS OF GOUGES



Middle Sweep. Flat Sweep. Regular Sweep. Nos. 14 and 15½ Paring Gouges are Made in Three Sweeps as Illustrated Above. Unless Otherwise Specified Regular Sweep will Always be Sent.

#### TURNING GOUGES BUCK BROS.



No. 17-Regular Extra Quality English Cast Steel, Tempered and Pol-

ished. The 1 in. Chisel is 10 ¼ in. Over All.

Width, In..... ¼ % ½ 5%

Wt. Dozen, Lbs. 1½ 2 3 4 5 3% Per Dozen .... \$11.00 11.00 12.00 13.00 15.20 17.40

. . . . . . . 1 1 1/2 114 134 2 One-half Dozen in a Box.

# TURNING CHISELS

BUCK BROS.



No. 16—Regular Double Bevel

Extra Quality English Cast Steel, Tempered and Polished. The 1 in. Chisel is 101/4 in. Over All. Width, Inches. . 1% Wt. Dozen, Lbs. 11% 34

1 1/2 3 Per Dozen . . . \$8.00 8.00 8.00 9.00 9.80 11.20 Width, Inches... 1 11/4 1 1/2 -08

5 % Wt. Dozen, Lbs. 8 10 13 Per Dozen . . . . \$12.20 14.20 17.80 23.00 27.60 33.00 One-half Dozen in a Box.

#### BUCK BROS. SPECIAL

No. 19 16 Sq. Point. No. 19 14 Rd. Point. No. 19% Sp'r. Point. No. 193% Left Skew. No. 19 % Rt. Skew.

These are the same length and weight as Regular Turning Chisels illustrated above. Always give number when ordering.

Width, In . . . 14 Per Dozen... \$10.40 11.40

Width, In... 34 1 Per Dozen... \$13.60 16.80

13.20

14.40

1 34 Width, In . . . Per Dozen... \$20.40 25.40

One-half Dozen in a Box.

# TOOTH TURNING CHISELS



For Pattern Makers and Wood Turners

High Grade File Steel, Teeth Cut on 45° Angle. Per Dozen

No. 1R—1½ in. Wide, Right Hand Skew, Weight Per Dozen 15 Lbs...... ..\$18.00 No. 1L-11/2 in. Wide, Left Hand Skew, Weight Per

One-half Dozen in a Box.

#### WOODWORKERS PARTING TOOLS BUCK BROS.

No. 18-Cutting Off

Extra Quality English Cast Steel Tempered and Polished. Width, Inches ..... 56 1/2 34 8 1/2 Length, Inches ..... 2 1/2 4 1/2 3 14

These Tools have blades about 7 in, long. The blades are thin at edges, with a heavy section down the center.



One-half Dozen in a Box.

# WOODTURNERS SIZING TOOLS



Japanned Steel Frame, Blades Tempered and Polished. Per Dozen

No. 25-4 in. Opening, Weight Per Dozen 15 Lbs. . \$40.00 One-sixth Dozen in a Box.

#### CARVING TOOLS

Finest Quality Steel, Hand Forged, Straightened and Tempered



Width, Inches... 15 14 35 12 34 1 Per Dozen..... 85.40 5.40 5.40 5.40 6.30 7.70

# STRAIGHT GOUGES

No. 5-Forged Steel

Width, Inches... 1/4 1/4 3/4 1/2 3/4 1 Per Dozen..... \$6.30 6.30 6.30 6.30 7.50 9.20



No. 8—Forged Steel Width, Inches... 1/8 1/4 3/6 1/2

Per Dozen, . . . . \$6.30 6.30 6.30 6.30 7.50 9.20



Width, Inches... 1/8 1/4 3/6 1/2 3/4 1 Per Dozen.... 87.20 7.20 7.20 7.20 8.40 12.80

# BENT GOUGES





No. 18-Forged Steel

Width, Inches... 16 14 36 12 34 1 Per Dozen..... \$8.00 8.00 8.00 8.00 9.80 15.00

#### FRONT BENT GOUGES

- 25

No. 25—Forged Steel

Width, Inches... 1/8 1/4 3/8 1/2 3/4 1 Per Dozen..... \$8.00 8.00 8.00 8.00 9.40 13.50



No. 28-Forged Steel

Width, Inches... 1/8 1/4 3/8 1/2 3/4 1 Per Dozen..... \$8.00 8.00 8.00 9.40 13.50



No. 30-Forged Steel

Width, Inches... 14 34 34 34 1 Per Dozen...... \$8.00 8.00 8.00 8.00 9.80 15.00

#### PARTING TOOLS



No. 39-Forged Steel

Width, Inches... 36 34 % 34 34 1 Per Dozen..... 89.50 9.50 9.50 9.50 15.00 24.00



No. 40-Forged Steel



No. 44-Forged Steel

 34
 1
 Width, Inches...
 16
 14
 36
 36
 34
 1

 9.80
 15.00
 Per Dozen.....
 \$11.00
 11.00
 11.00
 11.00
 17.00
 27.00

#### AVERAGE WEIGHTS OF CARVING TOOLS

Width, Inches ... 1/8 1/4 3/8 1/2 3/4 Weight Per Dozen, Lbs ... 3/8 1/2 3/4 17/8

## CARVING TOOL SETS

MILLERS FALLS

Best Quality Forged Steel Blades, Cocobolo Handles, Nickel Plated Ferrules



Per Set

No. 1 Sct—Consists of 1 U Tool, 1 Scraper, 1 Beveled Chisel, 1 V Tool, 1 Curved Gouge and 1 Straight Chisel, Length of Tools Over All 5½ in., Put up in a Neat Wooden Box, Weight Per Set 9 Oz...\$2.75



Per Set



No. 3 Set—Consists of 1 U Tool, 1 Veining Tool, 1
Narrow Bevel Chisel, 1 Narrow Chisel, 1 Small
Circular Gouge, 1 Small Flat Gouge, 1 Bent
Chisel, 1 V Tool, 1 Curved Gouge, 1 Large Circular Gouge, 1 Large Flat Gouge, 1 Wide Chisel
and 1 Matting Tool, in Hinged Hardwood Box..\$13.50

# CHISEL HANDLES

SOCKET FIRMER



Hickory, Leather Tipped Per Dozen

No. 131—Assorted for % to 2 in. Chisels, Weight Per Dozen 2 Lbs.........\$1.75 One Dozen in a Box.



Hickory, Malleable Iron Ring Per Dozen



Hickory, Plain

BUCK BROS. SOCKET FIRMER



Applewood, Polished Per Dozen

No. 95—Assorted for 1/8 to 2 in. Chisels, Weight Per Dozen 2 1/4 Lbs.......\$2.00 One Dozen in a Box.

SOCKET FRAMING



Hickory, Malleable Iron Ring Per Dozen

No. 51—Assorted for ¼ to 2 in. Chisels, Weight Per Dozen 2½ Lbs.......\$1.75 One Dozen in a Box.



Hickory, Leather Tipped Per Dozen

SOCKET BUTT



Hickory, Leather Tipped Per Dozen

No. 131B—Assorted for 1 to 2 in. Chisels, Weight Per Dozen 1½ Lbs......\$1.75 One Dozen in a Box.

# CHISEL HANDLES



Hickory, Leather Tipped, Brass
Ferrule Per Dozen



No. 11—Assorted for ½ to 2 in. Chisels, Weight Per Dozen 2 Lbs......\$1.00

BUCK BROS, TANG FIRMER



Applewood, Polished, Brass Ferrule Per Dozen

No. 93—Assorted for 1/8 to 2 in. Chisels, Weight Per Dozen 2 Lbs.......\$3.50



Polished Maple, Heavy Brass Ferrule Per Dozen

No. 92—Assorted for 1/8 to 2 in. Chisels, Weight Per Dozen 2 Lbs......\$2.40

TANG BUTT



Hickory, Leather Tipped, Brass Ferrule Per Dozen



Applewood, Polished, Brass Ferrule Per Dozen

# CARVING TOOL HANDLES



Polished Maple, Brass Ferrule Per Dozen

No. 65—Assorted Sizes, Weight Per Dozen 1 Lb........\$1.00 All Above, One Dozen in a Box.

# TURNING TOOL HANDLES



Polished Maple, Heavy Brass Ferrule Per Dozen

# FILE HANDLES



Soft Wood, Polished Steel Ferrules

Nos	1C	3C	5C
Length, Inches	4 1/4	4 1/2	5
Diameter, Inches	1 1/8	1 3/8	1 1/2
Wt. Dozen, Lbs	1	1 1/2	1 %
Per Dozen	\$0.30	. 40	.60
Open 5	Stock.		

#### LUTZ



Long Ferrule, Will Not Split

 Smooth Selected Birchwood, Heavy

 Polished Steel Ferrule.

 Nos. . . . . . . 1L
 2L
 3L

 Length, Inches. . . 4 4
 4 %
 4 %

 For Files, In . . . . 3 to 6 6 to 8 8 to 12

 Wt. Dozen, Lbs. 1 1 2
 2
 2

One Dozen in a Box.

#### SHUR-GRIP



Screws on to Tang of File

Cuts its own thread. Selected Hardwood, Pressed Steel Ferrule.

Nos. . . . . . 2G 3G 4G 5G Length, In. 4 4½ 5 5 5½ For File, In. 4-8 8-10 10-14 14-18 Wt. Dz., Lbs. 1½ 2 2½ 3 Per Dozen. \$2.00 2.00 2.50 3.00 One Dozen in a Box.

#### NICHOLSON



# Spun Brass Ferrules

Birchwood, Carefully Smoothed and Varnished. 2N Nos. . . . . . 4 % Length, Inches.. 5 % 12 For Files, Inches 14 10 Wt. Dozen, Lbs. Per Dozen..... \$2.50 2.00 2.25 3N 4N 4 % Length, Inches..... 6 For Files, Inches..... 8 Wt. Dozen, Lbs..... 2 1/2 Per Dozen..... \$1.60 1.30



Japanned Iron, Adjustable, with Steel Set Screw, holds Files to 12 in. Per Dozen

HANDLES	
ADZE EYE HAMMER	
Peerless High Grade Selected Second Growth White Hickory	
Length, Inches	14
Weight Dozen, Lbs	5 2.60
	2.00
Beauty Medium Grade Second Growth Hickory.	
Length, Inches	14
Weight Dozen, Lbs	5 1.90
XXX Blue Oak	1.90
Choice Selected Slow Growth Swamp Oak.	
	14
	5 1/2
Per Dozen	1.90
One Dozen in a Box.	
MACHINISTS HAMMER	
Peerless	
High Grade Selected Second Crowth White Till	
	18
Weight Dozen, Lbs 3 3½ 4	4 1/2
Beauty	. 25
Length, Inches	18
	.30
XXX Blue Oak	
Choice Selected Slow Growth Swamp Oak. Length, Inches	
Weight Dozen, Lbs	18 5
	.00
No. 1 Oak	
Select Straight Grained Timber,	2020
Length, Inches	18 5
Per Dozen \$1.40 1	.40
One Dozen in a Box.	
RIVETING HAMMER	
Peerless	
High Grade Selected Second Growth White Hickory.	
Length, Inches	14
Veight Dozen, Lbs 2 1/2	3
	.60
XXX Blue Oak Choice Selected Slow Growth Swamp Oak.	
	14
Veight Dozen, Lbs	1/2
리 이렇게 되어 하면 모든 전기 18시간에서 다시하면 회사보다 있다면 되었다면 있다면 하면 있다면 하면 모든데 그 사내리에 되었다면 다른데 보다.	.90
No. 1 Oak	
Coloot Chanlaht Classes A min. t.	
Select Straight Grained Timber.	14
ength, Inches	14 ½
ength, Inches       12         Veight Dozen, Lbs.       3         % F Dozen       \$1.35	
ength, Inches	1/2

Peerless 
 High Grade Selected Second Growth White Hickory.

 Length, Inches
 12

 Weight Dozen, Lbs.
 4 ½

One Dozen in a Box.

\$2.60

Per Dozen ......

# HANDLES BLACKSMITHS HAMMER



Pe	earl	less	

High Grade	Selected	Second	Growth	White	Hicko	ry.
Length, Inches	. 14	16	18	20	22	24
Wt. Dozen, Lbs		5	6	7	8	9
Per Dozen	. \$2.60	2.95	3.25	3.70	4.05	4.60
			a Crate			-7355
	X.	XX Blue	Oak			
Choice	Selected	Slow G	rowth S	wamp (	Oak.	
Length, Inches				. 1		18
Weight Dozen,	Lbs			. 5	1/2	6 1/4
Per Dozen				. 82.	00	2.00
		No. 1 (	)ak			
Se	elect Stra			mber.		
T AL T					201	

# One Dozen in a Box. REGULAR HATCHET

18

6 1/2

1.40

5 1/2

\$1.40

Length, Inches
Weight Dozen, Lbs
Per Dozen



		Peerle	SS			
High Grade				White	Hicko	ry.
Length, Inches Weight Dozen,				12 5	14	6 16
Per Dozen				82.60	2.60	2.60
		Beaut				
	a Grade			Hicko	ory.	
Length, Inches Per Dozen				12 81.90	14 1.90	15 1.90

	hoice	Selec	ted	SI	ow	(	Gr	o	wt	h	S	wa	ın	p	(	)	al	ζ.	
Length, Weight	Dozen,	Lbs.																	6 16
Per Do	zen		2.50			,					•	•							\$1.90
				Ne	, 1	1	0	al	ζ										

			raight		Timber.	
Length, Weight	Inches Dozen.	Lbs				6 14
Per Do	zen		50 C C C C			\$1.35
		One	Dozen	in a E	lox.	

#### LATHING HATCHET



					ree								
High G	rade	Sele	cted	S	eco	nd	Gr	owt	h	Wh	iite	Hick	ory.
Length, In	iches	Lba					٠.						12
Weight Do	жен,	LU8.											3
Per Dozen			ne	De	zen	i	i a	Bo	· ·				\$2.60

# BROAD HATCHET



		Peerles			
High Grade	Selected	Second	Growth	White	Hickory.
eight Dozen,	Lbs				18
er Dozen					\$3.60
	One .	Dozen in	a Box.		

#### BOYS AXE



High Grade	Selected	Second (	Growth White	Hickory.
Length, Inches	T.be		*** ******	28
Weight Dozen, Per Dozen	Lius		**********	12
Per Dozen	Two I	lozen in	n Cunto	\$8.00

# HANDLES

BENT	SINGLE	BIT	AXE
------	--------	-----	-----

	CALCULATION OF THE PARTY OF THE
28	TURNER DAY & MODERNIETHER DESCRIPTION OF THE PLANE.

	Trium	ph
i	Second	Growt

High Grade Selected Second Growth	White Hickory.
Length, Inches	
Weight Per Dozen, Lbs	
Per Dozen	



#### XXX Blue Oak

	Choice	Sele	cted	SI	ow	Gr	owth	Swamp	Oak.	
Length,	Inches									36
Weight I	Per Do	zen,	Los				2000	*****	101.00	
Per Doze	en									\$6.20

#### No. 1 Oak

			Grained		
Length, Inch Weight Per	nes Dozen.	Lbs	 	 	36 22
Per Dozen			 in a Cra	 	\$4.00

#### STRAIGHT SINGLE BIT AXE



#### Triumph

High Gr	ade Selected	Second	Growth	White	Hickory.
Length, Inc.	hes				36
Weight Per	Dozen, Lbs				22
Per Dozen					\$9.80
	Two I	ozen in	a Crat	e.	

#### DOUBLE BIT AXE



#### Triumph

High Gr	ade Selected	Second	Growth	White	Hickory.
Length, Incl	hes				36
Weight Per					
Per Dozen					\$9.80
			o Crat		



#### XXX Blue Oak

Choi	ce Selected	Slow	Growth	Swamp	Oak.
Length, Inc.	hes				36
Weight Per					24
Per Dozen					\$6.20

#### No. 1 Oak

	Selected	St	raight	Grain	ned Timber.	
Length, Inch	1es					36
Weight Per	Dozen,	Lbs				22
Per Dozen						\$4.00
	Tv	o I	Dozen	in a	Crate.	

#### CARPENTERS ADZE



#### Triumph

High Gra	ade Selected	Second	Growth	White	Hickory.
Length, Inch	ies				34
Weight Per					
Per Dozen					\$10.50
	Two I	lozen in	a Crat	0	

# HANDLES

#### SLEDGE

		-		
	Hercule			
Selected Second	d Growth	White H	lickory.	
Length, Inches	24	30	32	36
Weight Dozen, Lbs Per Dozen	14	16 6.50	18	22
			6.50	7.50
	XX Blue		(E. St.	
Choice Selected Length, Inches	30 Gr			
Weight Dozen, Lbs	18	32 20	34 22	36 24
Per Dozen	\$5.00	5.00	5.00	5.00
	No. 1 Oa	k		
Selected Str	aight Gra	ined Tim	ber.	
Length, Inches		32	34	36
Weight Dozen, Lbs	17	19	21	23
Per Dozen	\$3.50 ozen in	3.50 Create	3.50	3.50
1.00	osen in	a Crate.		
PICK	OR MAT	гтоск		
The second				
	No. of Lot	CONTROL OF	Street Square of Square	
	Triumph	y and the same of	00-00-000	
High Grade Selected			hito Hial-	O.F.I.
Length, Inches	Second C	nowth w.	nice Hick	36
Weight Dozen, Lbs				30
Per Dozen				\$12.30
	XX Blue			
Choice Selected	Slow Gre	owth Swa	mp Oak	
Length, Inches				36
Weight Dozen, Lbs				32
Per Dozen				\$8.00
	No. 1 Oa			
Select Stra				
Length, Inches Weight Dozen, Lbs				36
				31 \$4.50
	ozen in	a Crate.		φ4.00
	OAL PIC	K		
	-	-	-	-
	Triumph			
High Grade Selected				
Length, Inches Weight Dozen, Lbs				34 23
				23

High Grade	Selected	Second	Growth	White	Hickory.
Length, Inches					34
Weight Dozen,	Lbs				23
Per Dozen					\$9.80
	**	VV Dlas			

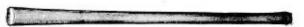
# XXX Blue Oak

CI	noice	oe.	recred	21	0	w	- 1	1	.0	199	E.	n	16	5 W	ra	п	ιp	н	1	C.F	51	ory.	
Length,	Inch	es													,			00		,	e:		34
Weight	Doze	en,	Lbs.	+													٠.						24
Per Do	zen .																						\$6.00

#### No. 1 Oak

S	elect St	raight	Grained Timber.	
Length, Inches				34
Weight Dozen,	Lbs	eroscus escentia		23
Per Dozen				\$4.00
	Two	Dozen	in a Crate.	

#### POST MAUL



#### XXX Blue Oak

Choice	Sel	ecte	d	Sle	w	G	F	ye	vt	h	S	w	a	m	p	y i	H	ic	k	01	y.
Length, Inche Weight Dozer	s i, I	bs.		• •																	36 20
Per Dozen .		Tw					i.									+					\$6.00

#### AXES

#### DREADNAUGHT SINGLE BIT, UNHANDLED



#### Dayton Pattern

Forged Steel, Warranted, Black Rustless Finish. Per Dozen No. 10—Assorted Weights 3½ to

to a spring temper.

One Dozen in a Box.

#### AUTOGRAF SINGLE BIT, HANDLED



Forged Steel, Warranted, Black Rustless Finish, Deep Etched, Gold Filled Selected Hickory Handles.

#### DREADNAUGHT SINGLE BIT, HANDLED



Dayton Pattern

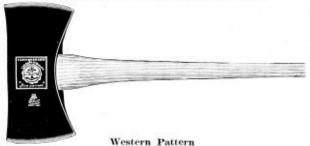
Forged Steel, Warranted, Black Rustless Finish, Mahoganized Selected Hickory Handles.

No. 30—Assorted Weights 3½ to 4½ Lbs., with 36 in. Handles.

No. 31—Assorted Weights 4 to 5 Lbs., with 36 in. Handles.

17.00

# One-half Dozen in a Crate. DREADNAUGHT DOUBLE BIT, HANDLED



Western Pattern

One-half Dozen in a Crate.

#### DREADNAUGHT DOUBLE BIT UNHANDLED

# 9

#### Western Pattern

Forged Steel, Warranted, Black Rustless Finish. Per Dozen No. 60—Assorted Weights 3½ to

These axes are forged from one solid piece of steel. The bit remains hard after repeated grinding. The head is hardened to a special temper.

One Dozen in a Box.

#### MAGIC CITY MINERS



#### Dayton Pattern

#### KELLY RAFTING



#### Flint Edge Brand

Hardened Poll, Hand Tempered, Chemical Black Finish, Cutting Edge Honed. Per Dozen No. 80—5 Lb., without Handle.....\$38.50

One Dozen in a Box.

#### KELLY FIREMENS



Hardened Pick Point

Hand Tempered Polished Blade, Poll Painted Red, Hickory Handle Painted Red. Per Dozen No. 129—Assorted 4 to 5 Lbs., 36 in. Handles.....\$50.00 One-half Dozen in a Crate.

Note-Weights of Handled Axes Do Not Include Handles.

#### BOYS HANDLED AXES



Forged Steel, Blue Finish, Polished Bit, Regular Hickory Handles. Per Dozen No. 2-Weight Each 21/4 Lbs., 28 in. Handle, Wt.

Per Dozen 42 Lbs......\$18.00

One-half Dozen in a Crate.

# HOUSE AXES

PLUMB



Mahoganized Handles

Hand Forged from One-Piece Special Analysis Steel, Armor Plate Heat Treated, Fine Keen Cutting Edge, Non-Rust Dull Black Finish. Per Dozen

No. HF665-2 1/4 Lbs., Handled with 19 in. Hickory .... \$19.50 Handles ......

One-half Dozen in a Box.

# BOY SCOUT AXES

PLUMB



The Official Axe of the Boy Scouts Per Dozen No. 680-Boy Scout, Special Axe Steel, Hand Forged, Non-Rusting Finish with Nail Slot, Axe Pattern Hickory Handle, Weight with Handle, 1 Lb. 10 Oz., the Handiest Tool in a Woodman's Kit, without Sheath .. No. 682-Same as No. 680, but with Heavy Russet 

One-half Dozen in a Box.

# BROAD AXES

PLUMB



#### Pennsylvania Pattern

Forged Steel, Non-Rusting Finish Per Dozen No. 692-12 in. Blade, Weight Each 7 Lbs......\$65.00 One-half Dozen in a Case.

# CARPENTERS ADZES



PLUMB

#### Half Head

Made of One Piece of Special Analysis Steel, Subjected to the Armor Plate Heat Treatment, making a Keen Fine Edge, Hard yet Tough.

No. 740-4 in. Cut, Average Weight Each 4 Lbs......\$3.00

Twelve in a Box.

# RAILROAD ADZES

PLUMB

#### Full Head

Made of One Piece of Special Analysis Steel Subjected to the Armor Plate Heat Treatment, Making a Keen Fine Edge, Hard yet Tough,

No. 770-5 in, Cut, Weight Each 

These adzes being made of one piece of steel can be reground until practically worn out.

Twelve in a Box.



# SHIP CARPENTERS ADZES



PLUMB

#### Spur Head

Hand Forged, Black Non-Rusting Finish, Made of One Piece of Special Analysis Steel, Subjected to the Armor Plate Heat Treatment Making a Keen Fine Edge, Hard Yet Tough.

Each

No. 780-Assorted 4 and 4 1/2 in. 

These adzes are made true to pattern, absolutely uniform, with perfect eye, head and bit.

Twelve in a Box.

# BROAD HATCHETS

PLUMB BROAD



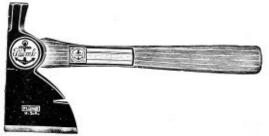
The Advertised Finish

Special Analysis Forged Steel, Black Finish, Mahoganized Hickory Handle, Patent Take-Up Handle Wedge.

Nos	2991	2992	2993	2994	2995
Size	1	2	3	4	5
Cut, Inches	4	4 1/2	5	5 1/2	6
Weight Each, Lbs	1 1/2	1 34	2 1/8	2 1/2	2 1/8
Wt. Dozen, Lbs	27	33	40	42	44
Per Dozen	\$22.00	25.20	28.40	31.60	34.80

One-half Dozen in a Box.

PLUMB HALF

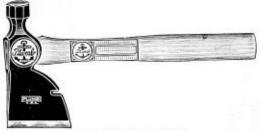


The Advertised Finish

Hand Forged Steel, Rustless Black Finish, Mahoganized

mickory mandie, Patent	таке-пр	Handle Wedge	69
Nos	2961	2962	2963
Size	1	2	3
Bit, Inches	3 14	3 5%	4
Weight Each	15 oz.	1 lb. 5 oz.	1 lb. 11 oz.
Weight Dozen, Lbs	16	20	24
Per Dozen	\$19.00	20.00	22.00
With	Checkere	ed Heads	
Nos		CH2961	CH2962
Size		1	2
Per Dozen		\$20.00	21.00
One-ha	lf Dozen	in a Box.	

PLUMB OCTAGON POLL HALF

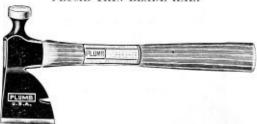


The Advertised Finish

Hand Forged Steel, Rustless Black Finish, Mahoganized Hickory Handle, Patent Take-up Handle Wedge

Titchory Timmune, Tu	cent ranc-up	manage wear	ac.
No			HF2291
Size			2
Bit, Inches			3 %
Weight, Each	.,,		1 lb. 6 oz.
Weight Dozen, Lbs.		********	21
Per Dozen			
On	e-half Dozen	in a Box.	

PLUMB THIN BLADE HALF



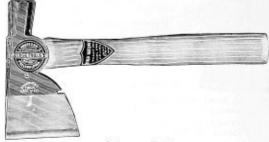
The Advertised Finish Hand Forged Steel, Rustless Black Finish, Mahoganized Hickory Handle, Patent Take-up Handle Wedge.

Nos	HF530	HF531
Size	1	2
Bit, Inches	3 14	3 %
Weight, Each	14 oz.	1 lb. 2 oz.
Weight Dozen, Lbs	15 %	18
Per Dozen	828.40	29.40

Light in weight and well balanced. Thin blade for fast cutting, large full face for driving. Special heat treatment toughens the blade beneath eye.

One-half Dozen in a Box.

#### HATCHETS HAMMOND HALF

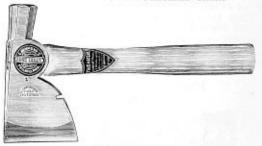


Octagon Poll

Swedish Iron Body, Tool Steel Head and Inserted Tool Steel Bit, Copper Bronzed Finish, Polished Bit and Face, Selected Hickory Handle.

Nos	30	31	32	33
Size	1	2	3	4
Bit, Inches	3 1/4	3 1/2	3 34	4
Weight Each 1	1b. 4 oz.	1 lb. 8 oz.	1 lb. 12 oz.	2 lbs.
Weight Dozen, Lbs		20	24	28
Per Dozen	\$17.00	18.00	19.00	21.00
One-ha	If Dozen	in a Roy		

#### HAMMOND FULL POLISHED HALF

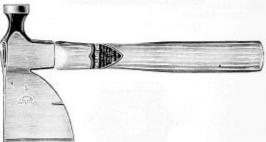


Octagon Poll

Swedish Iron Body, Tool Steel Head and Inserted Tool Steel Bit, Full Polished, Selected Hickory Handle.

breet Bit, I am I offened, Beferred III	caoij manuie.	
Nos	40 41	
Size	1 2	
Bit, Inches	3 1/4 3 1/2	
Weight Each	1 lb. 4 oz. 1 lb. 8 o	z.
Weight Dozen, Lbs	16 20	
Per Dozen	\$22.00 23.00	0
One-half Dozen in a	Box.	

#### HAMMOND THIN BLADE



Adze Eye, Bell Poll

Solid Crucible Steel, Full Polished, Extra White Hickory Handle.

On S westernament																	
No											-						. 46
Size										43							. 2
Bit, Inches					4		4							*		 . ,	 . 3
Weight Each		1.4										+					. 1 lb. 4 oz.
Weight Dozen,	LDS						4			-							. 16
Per Dozen								. ,									 \$28.00
	One	9-E	la.	11	- I	ж	124	en	in		a	-1	В	03	Γ.		



Thin Bit, Plain Eye, Bell Face

 Warranted Solid Tool Steel, Polished, Selected Hickory

 Octagon Handle.
 320

 No.
 2

 Size
 2

 Cut, Inches
 3 ½

 Weight Each, Lbs
 1½

 Weight Per Dozen, Lbs
 24

 Per Dozen
 \$30.00

The Octagon Handle insures a better grip and prevents the tool from turning in the hand.

It will drive as well as a nail hammer and cut easily. The thin bit gives the tool an even balance.



Octagon Neck, Round Poll

Warranted Solid Tool Steel, Fire Bronze Finish, Polished Bit and Poll, Selected Hickory Special Shaped Handle. 3181/2 318 2 Size ..... Cut, Inches ...... Weight Each, Lbs..... 3 14 3 1/2 3 34 1 3/2 1 % 1 14 20 24 28 Weight Per Dozen, Lbs..... 26.00 Per Dozen ..... \$22.50 24.00 With Scored Head 03181/2 Nos. . . . . . . . . . . . . . . . . 0317 1/2 0318 Size ...... Per Dozen ..... \$24.00 26.00 27.50

This style of hatchet is used extensively in car shops and is particularly adapted for this class of work.

One-half Dozen in a Box.



Warranted Solid Tool Steel, Polished, Selected Hickory

AA GELT GILLOCK	DOLLG	* 0.0 *	F1	T DESCRIPTION	 
Handle.					
No					 316
Size					 2
Cut, Inches					 3 1/4
Weight Each,					1 1/4
Weight Per D	ozen,	Lbs			 20
Per Dozen					\$30.00
	One	-half	Dozen	in a Box.	

Note-Weights Each do Not Include Handles.

## HATCHETS

G-T-W HALF



Octagon Poll

Solid Forged Tool Steel, Bronzed Finish, Polished Bit and Face, Selected Hickory Handle,

336	338	340
1	2	3
3 1/4		3 %
1 1/4	1 1/2	1 %
20	24	28
\$18.90	20.00	21.00
	1 3 ¼ 1 ¼ 2 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

One-half Dozen in a Box.

#### PHILADELPHIA HALF



Octagon Poll

Solid Steel, Forge Finish, Oiled Handles.

Nos	P. T. H. 1	P. T. H. 2
Size	1	2
Cut, Inches	3 1/4	3 %
Weight Each	15 oz.	1 lb. 5 oz.
Weight Dozen, Lbs	18	22
Per Dozen	\$11.60	12.60
One-half Dozen in	a Box.	

UNION HALF



Octagon Poll

Forged Steel, Black Forge Finish, Walnut Stained Handles,

No	202
Size	2
Cut Inches	3.5%
Weight Each	1 lb. 6 oz.
Weight Dozen, Lbs	2.3
Per Dozen	89.00

One-half Dozen in a Box.

PLUMB CLAW

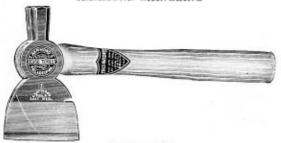


#### The Advertised Finish

Hand Forged Steel, Rustless Black Finish, Mahoganized Hickory Handle, Patent Take-up Handle Wedge.

received framework and the appropriate the case.	
Nos	2972
Size	2
Bit, Inches	4
Weight Each	
Weight Per Dozen, Lbs	23
Per Dozen	\$22.00
One-half Dozen in a Roy	

#### HAMMOND SHINGLING



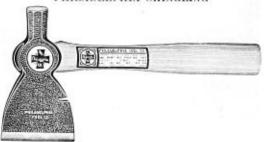
Octagon Poll

Swedish Iron Body, Tool Steel Head and Inserted Tool Steel Bit, Copper Bronze Finish, Polished Bit and Face, Selected Hickory Handle,

believed interior, indicate,			
Nos	11	12	13
Size	2	3	4
Bit, Inches	3 %	4	4 1/4
Weight Each	1 lb. 8 oz.	1 lb. 12 oz.	2 1b
Weight Dozen, Lbs	20	24	28
Per Dozen	\$17.00	18.00	20.00

#### PHILADELPHIA SHINGLING

One-half Dozen in a Box.

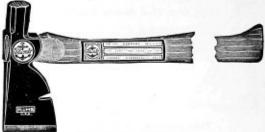


Solid Steel, Forge Finish, Oiled Handles

No	P. H. S. 2
Size	2
Bit, Inches	4
Weight Each	1 lb. 7 oz.
Weight Dozen, Lbs	27
Per Dozen	\$11.60
One-half Dozen in a Box.	

# HATCHETS

PLUMB RIG BUILDERS



The Advertised Finish

Hand Forged Steel, Rustless Black Finish, Mahoganized Hickory Handle, Patent Take-up Handle Wedge, Handle 18 in. Long.

No	582
Size	
Length, Inches	7 %
Bit, Inches	
Weight Each	
Weight Dozen, Lbs	
Per Dozen	. \$28.00

Knob End Handle prevents slipping. Back of eye flattened to help start nail.

One-half Dozen in a Box.

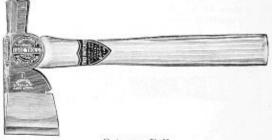
#### PHILADELPHIA LATHING



Solid Steel, Forge Finish, Oiled Handles

Nos	P. T. L. 1	P. T. L. 2
Size	1	2
Bit, Inches	2 1/4	2 1/2
Weight Each	14 oz.	1 lb. 1 oz.
Weight Dozen, Lbs	173/2	20
Per Dozen	\$10.50	11.60
One-half Dozen in a	Box.	

#### HAMMOND LATHING



Octagon Poll

Swedish Iron Body, Tool Steel Head and Inserted Tool Steel Bit, Copper Bronze Finish, Polished Bit, Selected Hickory Handle,

Nos.	70	71	72
Size	1	2	3
Bit, inches	2 1/2	2 34	3
Weight Each	12 02	1 lb.	1 lb. 4 oz.
Weight Dozen, Lbs	16	19	23
Per Dozen	\$17.00	18 00	19.00

One-half Dozen in a Box.



#### The Advertised Finish

Hand Forged Steel, Rustless Black Finish, Mahoganized Hickory Handle, Patent Take-Up Handle Wedge.

Nos	2981	2982
Size		2
Bit, Inches		2 1/2
Weight Each		1 lb. 1 oz.
Weight Per Dozen, Lbs	17	18
Per Dozen	\$19.00	20.00
One-half Dozen	in a Box.	

#### PLUMB FANCY PATTERN LATHING



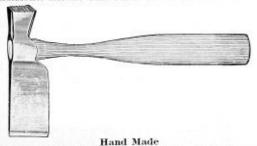
Underhill Pattern

Hand Forged Steel, Rustless Black Finish, Mahoganized Hickory Handle, Patent Take-Up Handle Wedge.

Nos	HF1961	HF1962
Head Checkered, Rows	9	10
Weight Each, Oz	15	15
Weight Per Dozen, Lbs	18	2.0
Per Dozen	\$31.50	32.50

Light in weight and well balanced. Thin blade for fast cutting, large full face for driving. Special heat treatment toughens blade beneath the eye, will not bend or break. One-half Dozen in a Box.

#### UNDERHILL BROS. GENUINE STAR BOSTON LATHING



Best Tool Steel, Charcoal Tempered, Full Polished.

Chicago Pattern	
Head Checkered 9 Rows.	Per Dozen

St. Louis Pattern

#### HATCHETS PLUMB LATH BOX



The Advertised Finish
Hand Forged Steel, Rustless Black Finish, Mahoganized
Hekery Handle Patent Take Up Handle Wedge

nickory Handle, Patent Take-Up Handle Wedge	
Nos	HF3011
Size 1	2
Bit, Inches 2 1/4	2 1/8
Weight Each 12 oz.	1 lb.
Weight Per Dozen, Lbs 17	22
Per Dozen \$30.50	31.50
One half Dance in a Box	

One-half Dozen in a Box.



Short Pattern, Two Nail Slots, Solid Steel, Black Forge Finish, Mahoganized Hickory Handle, Patent Take-Up Handle Wedge. Per Dozen

G. T. W. PRODUCE DEALERS



Warranted Solid Forged Tool Steel, Blue Body, Scored Head, Two Nail Slots, Selected Hickory Handle.

No. 286—2 in. Cut, Weight Each 10 Oz......\$18.00 One-half Dozen in a Box.

G. T. W. BARREL



Warranted Solid Forged Tool Steel, Polished, Scored Head, Two Nail Slots, Selected Hickory Handle.

Per Doze

No. 287—2 in. Cut, Weight Each ¾ Lb......\$18.00 One-half Dozen in a Box.

Note-Weights Each, Except Where Noted, Do Not Include Handles,

## NAIL HAMMERS

Plumb Hammers are made from Special Analysis Steel Die Forged, Large Full Face, Knife Edge Claws that Bite and Hold, Selected Second Growth Hickory Handles.



The Advertised Finish

Adze Eye, Hand Forged Steel, Rustless Black Finish, Mahoganized Hickory Handle, Patent Take-up Handle Wedge,

Nos	HF70	HF71	HF72	HF73
Size	0	1	1 1/6	2
Weight Each	1 lb. 12 oz.	1 lb. 4 oz.	1 lb.	13 oz.
Wt. Dozen, Lbs	23	23	20	17
Per Dozen	\$29.60	20.00	19.00	18.00

One-half Dozen in a Box.

#### PLUMB BELL POLL



Adze Eye, Hand Forged Steel, Rustless Black Finish, Mahoganized Hickory Handle, Patent Take-up Handle Wedge.

Nos	HF80	HF81	HF82	HF83	HF84
Size		11 1/2	12	13	4
Weight Each	1 lb. 4 oz.	1 lb.	13 oz.	7 oz.	4 oz.
Wt. Dozen, Lbs	23	20	17	9	6 16
Per Dozen	\$20.00	19.00	18.00	17.00	16 50

One-half Dozen in a Box.

#### PLUMB OCTAGON POLL



Adze Eye, Octagon Poll and Neck, Black Forge Finish, Mahoganized Hickory Handle, Take-up Handle Wedge.

Nos												¥	ï	i.										111
Size .										4														1 1/2
Weight		E	a	ch	1													-						1 lb. 1 oz.
Weight	t	D	03	ze	n	-	L	b:	s.		,					١.					2	į	7	20
Per Do																								\$22.00

One-half Dozen in a Box.

The Plumb Take-Up Wedge is cone shaped with heavy threads. Slot fits screw driver blade. As wedge is turned its sharp taper expands wood against all sides of the eye.

#### NAIL HAMMERS



The Advertised Finish

Straight Claw, Plain Face, Adze Eye, Hand Forged Steel Rustless Black Finish, Mahoganized Hickory Handle, Patent Take-up Handle Wedge.

Nos	HF 75	HF76
Size	1	1 1/4
Weight Each	1 lb. 4 oz.	1 lb.
Weight Dozen, Lbs	23	20
Per Dozen	\$20.00	19.00

One-half Dozen in a Box,



The Advertised Finish Straight Claw, Bell Face, Adze Eye.

Hand Forged, Non-Rusting Finish, M	lahoganized	Hickory
Handle. Patent Take-up Handle Wedge.		
Nos	HF85	HF86
Size	1	1 1/2
Weight Each	1 lb. 4 oz.	1 lb.
Weight Dozen, Lbs	23	20
Per Dozen	\$20.00	19.00
One Dozen in a Box	τ.	



Solid Crucible Steel, Adze Eye, White Hickory Handle.

Nos	1	1 1/2	2	3
Weight Each		1 lb.	12 oz.	7 oz.
Weight Dozen, Lbs	23	20	16 1/2	11
Per Dozen	\$22.00	20.50	19.25	17.00
Per Jozen	\$22.00	20.50	19.25	17.00

One-half Dozen in a Box.



Bell Face, Full Polished

		- Manufacture		
Solid Crucible Cast	Steel, Whit	te Hickory	Hand	le.
Nos.	11	111/2	12	13
Weight Each	1 lb. 3 oz.	1 lb.	12 oz.	7 oz.
Weight Dozen, Lbs	221/2	20	16 1/2	11
Per Dozen	\$22.00	20.50	19.25	17.00
One-half	Dozen in	a Box.		

Note-Weights Each Do Not Include Handles.

# NAIL HAMMERS



Forged Steel, Polished, Hardened and Tempered, Selected Second Growth Hickory Handle.

Sizes 1	1 36	2
Weight Each 1 lb. 4 oz.	1 lb.	13 oz.
Weight Per Dozen, Lbs 23	20	16
Per Dozen \$20.00	19.00	18.00
One-third Dozen in	a Box,	



No. 12—Adze Eye

Forged Steel, Polished, Hardened and Tempered, Selected Second Growth Hickory Handle. 1 1/2 3 Weight Each . . . . 1 lb. 4 oz. 7 oz. 1 lb. 13 oz. Weight Dozen, Lbs. 23 20 16 11 Per Dozen ..... \$20.00 19.00 18.00 17.00 One-third Dozen in a Box.

#### STANLEY OCTAGON POLL



No. 14—Adze Eye

Forged Steel, Polished, Hardened		ered, Se-
lected Second Growth Hickory Handle	Э.	
Sizes 1	1 3/2	2
Weight Each 1 lb. 4 oz.	1 lb.	13 oz.
Weight Per Dozen, Lbs 23	20	16
Per Dozen \$23.00	22.00	21.00
One-third Dozen in a	Box.	

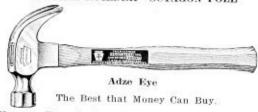
#### STANLEY RED-NECK



Forged Steel, Polished, Hardened and Tempered, Adze Eye, Round Poll, Polished Hickory Handle.

Eye, Round Poll, Pollshed Hickory Hi	anule.	
Sizes	2	1 1/2
Weight Each	13 oz.	1 lb.
Weight Per Dozen, Lbs	18	21
Each	\$21.00	22.00
One in a Box.		

NAIL HAMMERS
"MASTER BUILDER" OCTAGON POLL



Hammer-Forged from Master Steel, the Finest Steel obtainable for the Purpose, Full Polished.

Every Tool is given Individual Treatment in Tempore.

2 reig foot is given individual freatment i	n Temper-
ing and is Subject to Special and Severe Tests.	
Nos 746	745
Sizes 11/2	2
Weight Each 1 lb.	12 oz.
Weight Per Dozen, Lbs 20	16 1/6
Per Dozen	26.00
One-half Dozen in a Box.	



#### HELLER RUBBERI BELL POLL



Adze Eye, Shock Proof Hand Forged Steel, Polished, White Hickory Handle,

with Rubber Cushion Around Eye.	
Nos	511
Sizes 2	1 1/2
Weight Each	1 lb.
Weight Per Dozen, Lbs	20
Per Dozen \$21.00	22.00
One-half Dozen in a Box.	

#### HELLER RUBBERI ROUND POLL



Hand Forged Steel, Polished, White Hickory Handle,

with Kubber Cushion Around Eye.	
Nos	521
Sizes 2	1 1/2
Weight Each 13 oz.	1 lb.
Weight Per Dozen, Lbs	20
Per Dozen	22.00

The rubber cushion absorbs all shock experienced in the regular hammer. It also fastens the head so firmly to the handle that it cannot loosen.

One-half Dozen in a Box.

## NAIL HAMMERS

KELLY PERFECT PLAIN HEAD



Adze Eye, Round Poll Drop Forged Crucible Steel, Polished, Seasoned Hickory 5001 1/2 Nos. . . . . . . . . . . . . . 5000 5001

Size 0 11/2 Weight Each, Lbs.... 1 % 1 1/4 1 Weight Dozen, Lbs... 28 Per Dozen ...... \$29.50 23 20 19.00 20.00 One-half Dozen in a Box.

#### KELLY PERFECT MILLED HEAD



Adze Eye, Round Poll Drop Forged Crucible Steel, Polished, Seasond Hickory

Handle. Nos. . . . . . . . . . . . . . 5000M 5001M 5001 1/2 M 0 11/2 1 1 34 1 1/4 Weight Bach, 28 Weight Per Dozen, Lbs. 28 \$30.70 1 22 20 21.20 20.20 One-half Dozen in a Box.

#### KELLY FALLS CITY PLAIN HEAD



Adze Eye, Round Poll Drop Forged Crucible Steel, Polished, Seasoned Hickory

Handle. 5071 36 Nos. . . . . . . . . . . . . . 5070 5071 Size 0 1 1 1/2 Weight Each, Lbs.... 1 Weight Dozen, Lbs... 28 Per Dozen ...... \$14.40 23 20 14.00 13.50 One-half Dozen in a Box.

#### FALLS CITY MILLED HEAD



Adze Eye, Round Poll Drop Forged Crucible Steel, Polished, Seasoned Hickory

Handle.			
Nos	5070M	5071M	5071 1/2 M
Size	0	1	1 1/2
Weight Each, Lbs	1 3/4	1 1/4	1
Weight Per Dozen, Lbs.	28	23	20
Per Dozen	\$15.60	15.20	14.70
One-half	Dozen in	a Box.	

# NAIL HAMMERS

PHILADELPHIA BELL POLL Adze Eye

Solid Steel, Forge Finish, Oiled Handle. 145

Size 111% Weight Each, Lb..... Weight Per Dozen, Lbs..... 20 Per Dozen .... One-half Dozen in a Box.

UNION BELL POLL

Adze Eye Forged Steel, Black Forge Finish, Walnut Stained Handle.

Size ..... Weight Each, Lb..... 1 Weight Per Dozen, Lbs..... 21 Per Dozen .... One-half Dozen in a Box.

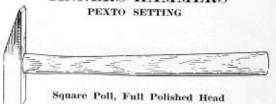
# PATTERN MAKERS HAMMERS



Crucible Steel, Oil Finish. Per Dozen No. 935-Weight Each 5 Oz., Weight Dozen 9 1/2 Lbs. \$20.00

These hammers are made of a special grade of steel to specifications furnished by expert pattern makers. They are so shaped that they can be used for driving in most difficult places, impossible to reach with ordinary hammer. One-half Dozen in a Box.

# TINNERS HAMMERS



Specially Designed for Sheet Metal Workers. Drop Forged High Grade Tool Steel, Specially Hardened. Nos. .... 2 Size Face, Inches..... 1 Weight Each, Oz..... 20 16 Weight Per Dozen, Lbs..... 21 18 Per Dozen ...... 15.00 One-half Dozen in a Box.

# MACHINISTS HAMMERS

PLUMB BALL PEIN



Octagon Pattern, Hand Forged Steel, Non-Rust Black Finish, Mahoganized Hickory Handles, Patent Take-Up Handle Wedges.

Nos	0000 6 oz. 7 %	000 8 oz. 9	00 12 oz 12 %	0 1 lb. 17 ½	11b. 4 oz. 20
Per Dozen	\$14.00	14.00	14.00	14.70	10.00
Nos	2		3	4	6
Weight Each	1 1b 8 o	2 1 lb 1	2 oz	2 1b. 2	2 lb. 8 oz.
Weight Dozen, Lbs. Per Dozen	2.4	20	5 36	31	3.7
	One-third	Dozen	in a Bo	x.	

#### MAYDOLE BALL PEIN



#### Octagon Pattern

Solid Crucible Cast Steel, Polished Face, Sides and Pein, White Hickory Handle.

Nos	122	123	124	125
Weight Each	1 lb. 14 oz.	1 lb. 8 oz.	1 lb. 4 oz.	1 1b.
Wt. Dozen, Lbs	36	31	26	22
Per Dozen	\$23.25	21.00	19.50	18.00
Nos	126	127	128	1281/2
Weight Each	13 oz.	10 oz.	7 oz.	5 oz.
Wt. Dozen, Lbs	18	13 1/2	10 1/2	9
Per Dozen	\$16.50	15.25	14.25	13.50
Nos		129	129 1/2	129 34
Weight Each		3 02	. 2 oz.	1 oz.
Weight Dozen, Lbs			4 1/2	3
Per Dozen			00 13.00	13.00

One-third Dozen in a Box.

#### HELLER RUBBERI BALL PEIN



#### Octagon Pattern, Shock-Proof

Hand Forged Steel, Polished, White Hickory Handle with Rubber Cushion Around the Eye Which Absorbs Shock and Prevents the Handle from Loosening.

Nos	0.00	801	802	803	804
Weight Each Wt. Dozen, Lbs. Per Dozen	8 oz.	12 oz. 12 ½	17 1/2	20	1 lb. 8 oz. 24 17 00
Nos Size	805		06 4	807 5	808
Weight Each1	1b. 12 oz 26 ½	3	1	2 lb. 4 oz. 33 ½ 21.00	2 lb. 8 oz. 37 22.30
rer Dozen	One-hal	ALCOHOLD TO THE		Box.	

# MACHINISTS HAMMERS



Octagon Pattern, Hand Forged Steel, Non-Rust Fin'sh, Mahoganized Hickory Handle, Patent Take-Up Handle Wedge.

Wedge. Nos.	HF415	HF417
Size	2	4
	1b. 8 oz.	2 lbs.
Weight Dozen, Lbs	24	3.0
	819.40	22.40



Octason Pattern, Hand Forged Steel, Non-Rust Finish, Mahoganized Hickory Handle, Patent Take-Up Handle

Wedge, Nos	HF395	HF397
Weight Each	1 lb. 8 oz.	2 lbs.
Weight Dozen, Lbs	24	3.0
Per Dozen		22.40
One-third Dozen in a	Box.	



Solid Forged Crucible Steel, Black Forge Finish, Mahoganized Hickory Handles, Patent Take-Up Handle Wedge. HF281 HF282 2 lbs. 2 lbs. 10 oz. 30 36 25 Weight Dozen, Lbs.... 21.00 818.25 19.65 Per Dozen ..... HF283 HF284 2 4 Size ...... 3 lbs. 3 lb. 8 oz. Weight Each ..... 62 Weight Dozen, Lbs..... 822.40 28.75 Per Dozen .....

# One-third Dozen in a Box. SCALING HAMMERS



Note-Weights Each Do Not Include Handles. One-half Dozen in a Box.

# RIVETING HAMMERS



Plain Eye, Hand Forged Steel, Non-Rust Black Finish, Mahoganized Hickory Handle, Patent Take-Up Handle Wedge.

Nos	HF250	HF251	HF252
Size	0	1	2
Weight Each	4 oz.	7 oz.	9 oz.
Weight Dozen, Lbs	6 1/2	7 1/2	10
Per Dozen	\$13.50	14.15	14.75
Nos	HF253	HF254	HF255
Size	3	4	5
Weight Each	12 oz.	15 oz	1 lb. 2 oz
Weight Dozen, Lbs	1346	1536	17
Per Dozen	815.35	16.00	17.20
One-half Doze	n in a B	ox.	





Solid Crucible Cast Steel, Full Polished, Selected Hickory Handle.

Nos	40	41	42
Weight Each, Ozs	24	18	13
Weight Per Dozen, Lbs	25	2.0	15
Per Dozen	\$20.00	18.00	16.75
Nos,	42 1/2	43	44
Weight Per Dozen, Lbs	11 16	9 16	7
Per Dozen	\$14.50	13.75	12.75
One-half Dozen in	a Box		



Solid Crucible Cast Steel, Full Polished, Selected Hickory Handle.

manuic.				
Nos	265	266	267	268
Weight Each	6 oz.	4 oz.	3 oz.	2 oz.
Weight Per Dozen, Lbs	8 1/2	6 1/2	4 1/2	3 16
Per Dozen	\$14.50	13.50	13.00	12.60
One-half	Dozen in	Box.		

# FARRIERS HAMMERS



Special Refined Crucible Tool Steel, Polished, Hickory Handle.

Weight Each with Handle, Oz	16
Weight Per Dozen, Lbs	19
Per Dozen	\$30.00
One-half Dozen in Box.	A STATE OF



No. 65-Heller Pattern, Adze Eye

Handle.	Steel,	Polished,	Hickory
Weight Each with Handle, Oz Weight Per Dozen, Lbs			16 19
Per Dozen			\$30.00
One-half Dozen	in Box		



Special Refined Crucible Tool Steel, Polished, Hickory Handle.

Weight Each with Handle, Lbs	234
Weight Per Dozen, Lbs	38
Per Dozen	\$50.50
One-quarter Dozen in a Box	



No. 62—Standard Pattern

Special Refined Handle.	Crucible Tool	Steel,	Polished,	Hickory
Weight Each with	Handle, Lbs			214
Weight Per Dozen, Per Dozen	. Lbs		******	38 848.00
One	e-quarter Dozen	in a P	ov.	\$48.00



No. 67—Standard Pattern

Hand	ecial le.	Refined	Crucible	Tool	Steel,	Polished,	Hickory
Weigh	it Ea	ch with	Handle, I	he			914

 Weight Per Dozen, Lbs.
 38

 Per Dozen
 \$48.00

 One-quarter Dozen in a Box.

Note-Weights Each, Except When Noted Do Not Include Handles.

# BRICK HAMMERS



Plain Eye, Solid Forged Steel, Black Forge Finish, Mahoganized Hickory Handle, Patent Take-Up Handle Wedge.

No	HF2580
Size	1
Weight Each, Lbs	1 1/2
Weight Per Dozen, Lbs	26
Per Dozen	\$17.50
One-half Dozen in a Box.	

#### VLCHEK



No. 132—Adze Eye, with Handle

Drop Forged Tool Steel, Ebony Finish, Selected Hickory Handle, Perfectly Balanced, Spalling Face, Hard Center, Four Tough Sharp Edges.

Size	1	2	3
Weight Each, Lbs		2	2 1/2
Per Dozen	\$18.50	19.00	20.00

This pattern was originated from suggestions from practical bricklayers.

One in a Box, with Handle.

# BRICK SKETZ

#### VLCHEK



No. 136-Adze Eye, with Handle

Drop Forged Tool Steel, Ebony Finish, Selected Hickory Handle Perfectly Balanced, Tough Sharp Cutting Edges.

Size	1	2	3
Weight Each, Lbs	1 3/4	2	2 1/4
Per Dozen	\$18.50	19.00	20.00
	A	fort adms a	Tribe or

These Hammers and Sketz have perfect adze eye. The handles will hold without wedges and are easily removed for redressing.

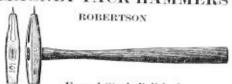
One in a Box, with Handle.

# PAVERS HAMMERS



Adze Eye

# MAGNET TACK HAMMERS



Forged Steel, Polished

One Dozen in a Box.

#### STANLEY MAGNETIC



One Dozen in a Box.

# BILL POSTERS HAMMERS



#### With Card and Tack Holder

Nickel Plated Hammer Head and Handle Trimmings, with Springs for Holding Card to Set First Tack.

Nos	503
Length Handle, Inches 36	4.5
Number of Sections 2	3
Weight of Head, Oz 5	5
Each	4.50
Two in a Box.	

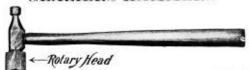
TACK HAMMERS



With Claw

Cast Iron, Polished, Hardwood Handle. Per Dozen

## GLAZIERS HAMMERS



Tool Steel Rotary Head, Nickel Plated, Polished Hardwood Handle Each

No. 99—10 ½ in. Long, Weight Each 6 Oz.......\$1.25

A hammer for glaziers and picture frame makers. With this tool glass can be set quicker and with more absolute security than by any other means. Six in a Box.

# UPHOLSTERERS HAMMERS



Heavy Pattern



No. 61—French Pattern

Solid Forged Steel, Polished, Rosewood Handle.

One-half Dozen in a Box.	
Per Dozen	36.00
Weight Each, Oz	16
Length of Head, Inches 6%	7
Diameter of Face, Inches	5/8
Sizes 4	5

#### SHOE HAMMERS

HAMMOND



Oval Face

Forged Steel, Polished, with Tool Steel Face, Selected Hickory Handle,

Nos		324
Sizes	0	1
Weight Each, without Handle, Oz	11	13
Per Dozen	\$10.00	10.50
One-half Dozen in a	Box.	

#### CAST IRON



For Home Work

	Cast Iron, Japanned, Polished Face.	
No.	4—Weight Per Dozen 12 Lbs	Per Dozen
	One-half Dozen in a Box.	

# SLATERS HAMMERS



With Leather Handle

One-piece Drop Forged Steel, with Punch Point, Hammer End and Center Claw Tempered to withstand heavy work.

#### SLATERS RIPPERS



Forged Crucible Cast Steel

The Blade is drawn very Thin and Hook End Correctly Tempered for hard wear. Each No. 24—Blade 24½ in. Long, Weight Each 2½ Lbs. .\$4.20

# SLATERS STAKES



Forged from Fine Tool Steel, Hardened and Ground Eac

No. 18—18 in. Long, Weight Each 2 1/4 Lbs.......\$2.50

# BUMPING HAMMERS

FAIRMOUNT



For Sheet Metal Work

For Reshaping and Straightening Automobile Fenders.

Drop Forged Tool Steel, Black Finish, Polished Faces,
Selected Hickory Handle.

Each

# DOLLY BLOCKS FAIRMOUNT





No. 1059.

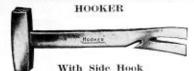
No. 1068.

# Ground and Full Polished

Use as a Seaming Block for irregular sheet metal products, and for reshaping and straightening Automobile Fenders.

Nos,	1068
Length, Inches	4 %
Width, Inches	2 1/4
Weight Each, Lbs	2 1/2
Each \$1.50	1.50

## CRATE OPENERS



Forged from One Bar of Fine Quality Steel, Carefully Tempered, Polished, Heavily Nickel Plated. Per Dozen No. 42-9 in. Long, Weight Each 15 Oz.......\$15.00

One face of hammer head scored and one plain polished. Nails can be gripped in most any position and at just the right angle to pull easy. The best pocket tool for opening boxes, crates, barrels, prying off lids, hammering, etc. One-half Dozen in a Box.



One Piece Forged Steel, Hardened Head, Tempered Claw, One Face Scored, One Smooth, Nickel Plated Finish, Full Polished. Per Dozen

No. 82-9 1/4 in. Long, Weight Each 15 Oz.........\$12.00 One-half Dozen in a Box.

#### BABY TERRIER



Pocket Pattern

One Piece Forged Steel, Hardened Head, Tempered Claw, One Face Scored, One Smooth, Polished and Nickel Plated Finish. Per Dozen 

# One-half Dozen in a Box. NAIL PULLERS

GENUINE GIANT IMPROVED



Improved Hand Protector, New Box Joint, Non-Rolling Forged from Tool Steel in Three Parts, Black Enamel Handle, Polished Jaws. Per Dozen

No. 1-Total Length 18 in., Length of Rammer 12 in., Weight Per Dozen 60 Lbs......\$24.00

#### NEW JUMBO



High Grade Tool Steel Jaws and Shank, Hardened, Oil Tempered and Polished Black Enameled Iron Handle.

Per Dozen No. 57-18 in. Long, Weight Per Dozen 60 Lbs...\$20.00

#### MORRILL



Forged Steel Jaws, Foot and Shank, I-Beam Section Forged Finish, Japanned Cast Hammer, Box Per Dozen Joint Jaws.

No. 1M-18 in. Long when Closed, Weight Per Dozen 50 Lbs..... The puller has handle and hand guard to protect hand. the foot is centrally mounted in box joint to keep jaws from spreading, there are no springs to break.

# BOX CHISELS

ROUND



Forged Steel, Black Finish, Polished Claw

Per Dozen

No. 289-14 in. Long. Weight Per Dozen 141/4 Lbs. \$10.00 One-half Dozen in a Box.

#### FLAT



#### Forged Steel, Polished

Per Dozen

No. 291-14 in. Long, Weight Per Dozen 14 1/2 Lbs. \$10.00 One-half Dozen in a Box.

#### NAIL CLAWS

SARGENT



Wrought Steel, Japanned, Five Fingers

Each

No. 0-12 in. Long, Weight Per Dozen 16 Lbs....\$1.15 Five in a Box.

#### TACK CLAWS



#### Square Shank

Forged Steel Blade, Polished Rosewood Finish Handle, Nickel Plated Steel Ferrule.

Per Dozen

No. 148-7 in. Long. in Square Steel, Weight Per Dozen 2 Lbs......\$2.00

One Dozen in a Box.



#### Flat Shank

Forged Steel Blade, Polished, Ebonized Hardwood Handle, Nickel Plated Steel Ferrule, Riveted Tang.

Per Dozen

No. 151-6 in, Long, Weight Per Dozen 11/2 Lbs...\$2.00 One Dozen in a Box.

# CARPET STRETCHERS



#### Deep Socket

Forged Steel, Full Polished Finish.

Per Dozen No. 135-Weight Per Dozen 7 Lbs..... One-half Dozen in a Box.

#### BOX SCRAPERS STANLEY



For Removing Markings from Boxes

Cast Steel Blade, Japanned Malleable Iron Frame, Maple Handle.

No. 70-13 in. Long. 2 in. Blade, Weight Each 1 Lb. \$1.15 Extra Blades ..... .25

The face of the bottom and the edge of the cutter are slightly curved away from the center, allowing the user to scrape any uneven surface.

Six in a Box.

#### DANDY



Forged Tool Steel

Natural Finish Hardwood Handles, Riveted and Varnished. No. 15-12 1/2 in. Long, Blade 2 in. Wide, Weight

Each 1 1/4 Lbs......\$8.40

The angle of the blade is just right for quick work and is carefully tempered to hold its edge. One-half Dozen in a Box.

#### DOUBLE HANDLE



Riveted

Forged Steel Blade, Hardwood Handle.

Per Dozen No. 271-Light Pattern, Weight Per Dozen 8 % Lbs. \$8.00 One-half Dozen in a Box.

#### TRIANGULAR



Single Handle, Riveted

Adjustable Forged Steel Blade, Hardwood Handle. Per Dozen No. 272-Weight Per Dozen 8 Lbs... ....\$7.00 One-half Dozen in a Box.

#### SHIP SCRAPERS



Adjustable Triangular Blade

Cast Steel Blade with Three Beveled Edges, Malleable Iron Ferrule, Polished Maple Handle, Sharpened Ready for Per Dozen

No. 8-17 in. Long Over All, 13 1/2 in. Handle, Width of Cutting Edge 5 in., Weight Per Dozen 19 One Dozen Blades in a Box, Handles Loose,

BOX AND HAY HOOKS

SARGENT



Bright Finish, White Hardwood Handles

Each

No. 2—7¼ in. Long, ¾ in. Round Steel Stock, Handle 5¼ in. Long, Weight Each 7½ Oz........80.46

Ten in a Box.



Extra Heavy

Octagon Steel, Forge Finish, White Hardwood Handle.

No. 25-8 1/2 in. Long, 1/2 in. Diameter Steel Handle 5 1/4 in. Long, Weight Each 14 Oz............\$0.66 Ten in a Box.



Bright Finish, Hardwood Handle Each No. 15-9 in. Long, % in. Diameter Hook, 51/4 in. Handle, Weight Each 9 Oz......\$0.56 Ten in a Box.



Bright Finish, Black Hardwood Handle Each Five in a Box.

# MARKING POTS STANDARD



I. C. Tin, Flaring Shape Per Dozen 

COMBINATION BALL

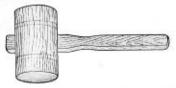


Used for Either Hand or Stencil Brush Marking

The Ball in the pot gives an even distribution of the marking fluid, while the top of the pot affords a daubing surface to prime the brush giving just the proper amount of ink for clean and legible marking. No. 2—Combination ......\$9.45

# MALLETS

ROUND



#### Hickory Head, Mortised Hardwood Handle

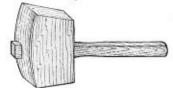
1	2	3
5	5 1/2	6
3	3 1/2	4
10 1/2	13	13
15 1/2	22	2836
\$7.80	10.80	13.20
	$\begin{array}{c} 3 \\ 10 \frac{1}{2} \\ 15 \frac{1}{2} \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

#### Lignumvitae, Mortised Hardwood Handle

								,		6
										5 1/2
				. ,						3 1/2
8.							 			
										29
							 .,		0.4	\$16.00
	 3	3	 	 	 	 	 	 	 	3

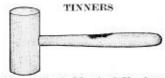
Open Stock.

#### SQUARE



#### Hickory, Mortised Hardwood Handle

Nos	8	9	10
Length, Inches		6 1/2	7
Face, Inches	2 1/2 x 3 1/2	2 34 x3 34	$3 \times 4$
Handle, Inches	103/2	13	13
Weight Dozen, Lbs	16	21 1/2	24
Per Dozen	\$9.60	12.00	14.40
0	pen Stock.		



#### Round, Hickory Head, Mortised Hardwood Handle

Nos	4 16
Length of Head, Inches 5 1/2	6
Diameter of Head, Inches 21/2	3
Length of Handle, Inches 10 1/2	10 1/2
Weight Per Dozen, Lbs 111/2	12 1/2
Per Dozen \$4.00	5.00

Open Stock.

#### IRON RING



Hickory Head, Iron Rings,	Mor	tised	Hardwood	Handle
No				
Length of Head, Inches				. 6
Faces, Inches				. 4
Length of Handle, Inches				. 13
Weight Per Dozen, Lbs				. 34 1/2
Per Dozen				. \$20.00
Open				

MALLETS



Standard Weights

Rawhide Head, Hardwood Handle.

Nos	OM	1 M	2M	3M
Diameter Head, In	1	1 1/4	1 1/2	1 %
Length Head, Inches	2.36	3 1/4	3 1/4	3 %
Weight Each, Oz	2	4	6	8
Per Dozen	\$10.00	12.50	14.00	15.00
Nos		4M	5M	6M
Diameter Head, Inches.		2	2 %	2 34
Length Head, Inches		3 1/2	4 1/4	4 %
Weight Each, Oz		10	22	24
Each	CHECKE.	\$20.50	45.00	51.25
	Open St	ock.		

# RAWHIDE FACED HAMMERS



Japanned Iron Head, Rawhide Faces, Hardwood Handle

Nos	$\theta$ H	1H	$^{2H}$	3H	4H	5H
Diam. Face, In	7/8	1 1/4	1 1/2	1.54	2	2 34
Wt. Each, Lbs	1/2	1 1/8	1 1/8	2 1/4	4	5 34
Per Dozen	822.70	26.50	33.75	40.00	58.50	83.75
Extra Faces—						

Dozen Pairs... 7.00 7.60 9.00 11.50 16.00 22.75 Open Stock.

# COPPER HAMMERS



Without Handles

Made from Solid Bar Pure Copper, used for hammering finished work without marring.

Nos	1	2	3	4	5	6	7
Wt, Each, Lbs		1	1 1/2	2	2 1/2	3	4
Each	80.55	.65	. 90	1.20	1.50	1.80	2.25
						Per :	Dozen
Handle Exten							21 75

Open Stock.

# CALKING MALLETS



Open Stock.

#### STONE CUTTERS MALLETS



Second Growth Hickory, 6 in. Hardwood Handle

Nos	83	84	S5
Size, Inches	5 1/2	6	6 34
Weight Each, Lbs.	3	4	5
Each	\$1.75	2.00	2.50
Nos	86	87	88
Size, Inches	6 %	7 1/4	7 34
Weight Each, Lbs.	6	7	8
Each	\$3.00	3.50	4.00
Weights given are	approx	imate	only.

# SOFT METAL HAMMER MOULDS



For Moulding Soft Metal Hammers

The hammer handle is placed in position and the mold clamped. Lead or babbitt is melted in the ladle, which holds just enough for one hammer. The mold is then tilted, the metal runs into the mold and the hammer is ready when mold is removed. Handle is included with each mold.

Nos	2H	зн	4H	5H
For Hammers, Wt. Each, Lbs.	2	3	4	5
Each	\$2.00	2.25	2.50	2.75

Everyone who handles finished work knows the efficiency of a soft metal hammer. They can be used on finished steel, brass, bronze, aluminum, gears, cams, sprockets, etc.

#### POST MAULS



No. 90A-Cast Iron

Japanned Head, Inserted Hickory Faces, 36 in. Hickory Handle.

Size, Lbs	12	14	16
Length Head, Inches	5	5 1/4	5 1/4
Diameter Face, Inches	3 1/4	3 14	3 %
Each	\$2.50	2.90	3.25

These mauls are used for a wide range of work for driving posts, stakes, etc.

#### SEWER BUILDERS MAULS



Best Second Growth Hickory Head, 2x ¼ in, Iron Bands, 36 in. Selected Hickory Handle

Nos			4 2 4 4	 						130	612
Size of	Head, In	ches		 							6x12
Average	Weight	Each.	Lbs.	 	11/21/2		400	 	F1.4	0000	21
Each				 		٠.					\$5.00

# BUNG STARTERS



Riveted Style

# HOOP DRIVERS



Solid Crucible Steel

#### COOPERS SHORT OVAL



Solid Crucible Steel

Varnished Hickory Handle, with Ring.
Per Dozen
No. 166—Assorted 2½ and 2¾ in.....\$39.25
Open Stock.

#### COOPERS SOCKET



#### Solid Crucible Steel

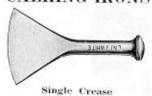
Varnished Hickory Handle, with Ring.

Per Dozen

No. 164—Assorted Widths ......\$35.00

Open Stock.

# CALKING IRONS



These are made with extreme care of the finest material and are the best calking irons on the market.

# SLEDGES AND HEAVY HAMMERS

#### BLACKSMITHS SLEDGES



No. 322-Cross Pein

Solid Cast Steel, Oil Finish, Polished Face.

Weight, Lbs	6	8	10	12
Length, Inches.		7	7 1/2	8
Face, Inches	. 2	2 14	2 1/2	2 %
Per Pound	80.30	.30	.30	.30



No. 326-Straight Pein

Solid Cast Steel, Oil Finish, Polished Face.

Weight, Lbs	6	8	10	12
Length, Inches.		7	7 1/2	8
Face, Inches	2	2 14	2 1/2	2 %
Per Pound	\$0.30	.30	.30	.30



No. 325—Double Faces

Solid Cast Steel, Oil Finish, Polished Face.

Weight, Lbs	4	5	6	8
Length, Inches	5 1/2	6	6 1/4	6 %
Face, Inches	1 1/8	2	2	2 14
Per Pound	80.40	. 30	.30	.30
Weight, Lbs	10	12	14	16
Length, Inches	7 1/2	8	8 1/2	9
Face, Inches	2 1/2	2 %	2 34	2 7/8
Per Pound	80.30	.30	.30	.30

#### BLACKSMITHS HAND HAMMERS



No. 190-Western Pattern

Solid Cast Steel, Oil Finish, Polished Face.

Weight, Lbs 2 Length, Inches 4 ½ Face, Inches 1 ¼ Per Pound 80 . 50	2 1/2 4 % 1 % .50	3 4 % 1 111 . 40
Weight, Lbs	31/2	4
Face, Inches	5 1 %	5% 1%
	80.40	.40

#### BLACKSMITHS HAND HAMMERS



No. 191—New England Pattern Solid Cast Steel, Oil Finish, Polished

Face.	, 011 2 111	, 1 011	on ou
Weight, Lbs	2	2 1/2	3
Length, Inches	4 %	4 5%	4 34
Face, Inches	1 7	1 %	1 14
Per Pound	80.50	. 50	.40
Weight, Lbs	en en en en	3 1/2	4
Length, Inches		5	5 1/4
Face, Inches		1 34	1 %
Per Pound		\$0.40	.40

#### HAND DRILLING OR STONE CUT-TERS HAMMERS



No. 203—New England Pattern Solid Cast Steel, Oil Finish, Polished

Faces.			
Weight, Lbs	2	2 1/2	3
Length, Inches	4 1/8	4 1/4	4 %
Face, Inches	1 1/8	1 1/4	1 %
Per Pound	\$0.55	.55	.50
Weight, Lbs		3 1/2	4
Length, Inches .		4 34	4 1/8
Face, Inches		1 %	1 12
Per Pound		\$0.50	.50

#### STRIKING OR DRILLING HAMMERS



No. 229—Long Pattern Solid Cast Steel, Oil Finish, Polished

Faces.	,	300000000000000000000000000000000000000	
Weight, Lbs	6	8	10
Length, Inches	6 1/2	7 1/8	7.5%
Face, Inches	2	2 1/8	2 1/8
Per Pound	\$0.30	.30	.30
Weight, Lbs		14	16
Length, Inches	8	8 14	8 5%
Face, Inches	2 1/4	2 3%	2.7%
Per Pound	80.30	.30	.30

#### STONE SLEDGES



No. 337—Oval Face, Sharp Pein Solid Cast Steel, Oil Finish, Polished

Sond Cast Steel	, on rm	isu, rou	anec
Face.			
Weight, Lbs	8	10	12
Length, Inches	7 1/8	7 3/2	7.79
Face, Inches	2 1/8	2 %	2 1/2
Bit, Inches	2 1/8	$2 + r_{\sigma}$	2 1/2
Per Pound		. 30	. 30
Weight, Lbs		14	16
Length, Inches .		8 1/4	8 %
Face, Inches		215	2 7/
Bit, Inches		211	2 %
Per Pound		\$0.30	. 30

#### NAPPING HAMMERS



No. 212-Oval Faces

Solid Cast Steel, Oil Finish, Polished Faces.

Weight,	Lbs	3	4	5
Length.	Inches	6 14	6 1/2	6 %
Face, In	ches	1 1/4	1 1/4	1 %
Per Pou	ind	\$0.40	.40	.40

#### SPALLING HAMMERS



No. 222—Single Face No. 223—Double Face

Solid Cast Steel, Oil Finish, Polished Face.

Weight, Lbs Length, Inches Face, Inches Width Bit, In Each		10 8 ½ 2 ¼ x1 ¾ 2 ⅓ . 40
Weigth, Lbs Length, Inches Face, Inches Width Bit, In Each	9 2 ½ x1 ¾ 2 ¾ 2 ¾	14 9 ½ 2 % x1 % 2 ¼ .40
Weight, Lbs Length, Inches Face, Inches Width Bit, Inches Each		16 9 % 2 % x1 % 2 % 80 . 40

#### BUSH HAMMERS



No. 197-Double Face

Solid Cast Steel, Oil Finish, Regular Cut, One End 25 Teeth, Other End 36 Teeth.

Weight, Lbs.	5	6	7	8
Length, In	6 1/2	6 %	7	7 34
Face, In	1 34	1 7/8	2	2 1/8
Each	\$1.00	1.00	1.00	1.00

#### STONE AXES



No. 55-Double Bit

Solid Cast Steel, Oil Finish.

Weight, Lbs	6	8	10
Length, Inches.	8	9	10 1/2
Width Bit, In	2 1/2	2 %	3
Each	80.50	. 50	.50

#### CROW BARS



#### No. 1160-Wedge Point

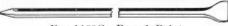
Solid Cast St	eel, Oil F	inish.		
Weight, Lbs 10	12	14	16	18
Length, Feet 4		4.56	411/12	5
Size of Square, Inches. 1	1 1/8	1 75	1 1/4	11/4
Each	60 1.90	2.25	2.55	2.90
Weight, Lbs	20	22	24	30
Length, Feet		57/12	5 34	6
Size of Square, Inches	1 1 1/8	1 3/8	$1\frac{7}{16}$	1 %
Each	\$3.20	3.50	3.85	4.80



#### No. 1161-Pinch Point

Solid Cas	t Steel	, Oil F	inish.		
Weight, Lbs	10	12	14	16	18
Length, Feet	4	4 1/2	4 %	411/12	5
Size of Square, Inches.	1	1 1/8	1 /2	1 1/4	1 34
Each	\$1.60	1.90	2.25	2.55	2.90
Weight, Lbs		20	22	24	30
Length, Feet			5740	5 34	6
Size of Square, Inches	1 6 9 7 7 7	1 %	1 3/8	$1_{16}^{-1}$	1 %
Each		\$3.20	3.50	3.85	4.80

# TELEGRAPH DIGGING BARS



# No. 1160C-Round Point

Solid Cast Steel, Oil Finish.	
Length, Feet 6	8
Diameter, Inches 1 1/8	1 1/8
Weight, Lbs	27 1/2
Each	4.00

# WRECKING BARS



Gooseneck Pattern

Drop Forged Oc	tagon St	eel, with	Claw ar	id Chise.	Ends.
Black Finish.					
Nos	112	118	124	130	136
Length, Inches	12	18	24	30	36
Diameter, Inches	1/2	5%	34	34	3/4
Weight Dozen, Lbs.	8	18	37	4.7	53
Don Dones	20 10	0 50	E EA	ATT PRINT	0 50

STANLEY



#### **Duplex Pattern**

Drop Forged Hexagon Steel Black Finish	with Red
Goose Neck, Polished Bit, Both Ends Slotted to	pull nails.
Nos	300
Length, Inches 24	3.0
Diameter, Inches %	34
Weight Dozen, Lbs 46	52
Per Dozen	16.80

#### SHIP OR TOP MAULS



#### No. 241-Standard Pattern

Solid Cast Steel, Oil Fin	ished, Po	lished Face.	
Weight, Lbs	4	5	6
Length, Inches		8 %	9
Small Face, Inches	3/8	70	1/2
Large Face, Inches	1 34	1.7%	2 1/8
Per Pound	80.42	.42	. 42

#### RAILROAD TRACK MAULS



No. 238—Regular Pattern

Solid Cast Steel, Oil Finished, Polished Faces. Weight, Lbs. . . . . . . . 10 Length, Inches ..... 9 1/2 10 10 1/2 11 1114 114 Small Face, Inches. . . . 1 118 1 1/8 156 Large Face, Inches.... 1% 1 1/4 1 16 Per Pound ..... \$0.30 .30 .30 .30 .30

# CAR MOVERS

SAMSON



Compound Leverage, Single Spur, Top Grip

Annealed Malleable Iron Castings, Refined Crucible Steel Spur, with Four Sharp Edges, Tool Steel Spring, Hard Maple Handle.

The Samson Car Mover is the only car mover made with a tool steel spring for releaving the spur from the rail, thus permitting the mover to slide easily, on the rail without wear or injury to the spur. The principle is correct. The Samson Car Mover has 100 per cent pushing movement—no exertion wasted in lifting the wheel, works unfailingly on wet and slippery rails—up-grade or on a curve.

With a Samson one man can move a loaded or empty car quickly and with a minimum amount of exertion.

# RAIL BENDERS

JIM CROW



#### Without Lever

Made from best grade Open Hearth Steel, Machine Cut Square, Thread, Steel Screw.

Most compact and simplest device for bending and straightening light rails and car irons.

No									3	8.									3
Capacity Rails, Lbs																			7.5
Span of Claws, Inches.					9			Ō,	å			Ť		-		*			24
Diameter Screw, Inches		ċ	•		-					*		-			-		4	-	24
Hole for Lever, Inches.								-	٠					-			•	7	2 1/2
Weight Each I be		1		*			*		*					٠				-	1 1/4
Weight Each, Lbs							-		+				-						130
Each	-						-				1						9	0	\$48.00

# TRACK LEVEL BOARDS



Fitted with Adjustable Index to Level

# RAILROAD OR CLAY PICKS

IRON CITY



No. 296-Adze Eve

Soft Steel Body, Cast Steel Points, Japanned Finish.

Weights Each, Lbs..... 5 to 6 Per Dozen ..... \$14.00 6 to 7 7 to 8 15.00 16.00 Two Dozen in a Case.

# DRIFTING PICKS

IRON CITY



Adze Eye

Soft Steel Body, Cast Steel Points, Japanned Finish.

Per Dozen No. 282—Size 4, Weight Each 5 Lbs......\$18.00

Two Dozen in a Box.

# COAL PICKS

FLAT PATTERN



No. 3110-Soft Bessemer Steel Eye Tool Steel Points, Oil Finish.

Weight Each, Lbs.... 134 2 214 212 3 Per Dozen ...... \$8.50 8.50 9.00 9.00 9.50 Two Dozen in a Box.

#### STONE PICKS



No. 294-For Quarry Use

One Piece Best Grade Steel, Oil Finish. 6 8 10 13 1/2 13 11 2 1/8 2 % 19.00 22.00

#### MATTOCKS

IRON CITY



No. 425-Short Cutter

Soft Steel Body, Cast Steel Points, Japanned Finish.

Width Blade, Inches..... 3 314 4 Length Cutter, Inches..... 4 1/2 Weight Each, Lbs..... 5 4 1/2 4 1/2 5 1/2 5 1/2 Per Dozen ..... \$16.00 16.50 16.50

Two Dozen in a Case.



No. 424-Long Cutter

Width Blade, Inches..... 3 
 Length Cutter, Inches
 5 ½

 Weight Each, Lbs
 5

 Per Dozen
 \$16.00
 5 1/2 5 1/2 6 6 17.00 17.00

Two Dozen in a Case.

#### GRUB HOES

IRON CITY



No. 440-Western Pattern

Fine Quality Cast Steel, Japanned Finish.

Sizes	2
Width Blade, Inches 3 %	4
Weight Each, Lbs 3 1/2	4
Per Dozen	14.00
Two Dozen in a Case	

#### CANT HOOKS



#### Duck Bill Hook

Malleable Iron Clasp and Extension Toe Ring, Hand Hammered Crucible Steel Duck Bill, Painted Iron Parts, 21/2 in. Diameter Rock Maple Handles.

Per Dozen

No. 288-4 1/2 ft. Handle, Weight Per Dozen 96 

#### PEAVIES

Duck Bill Hook

Malleable Iron Split Rib Socket, Hand Hammered Crucible Steel Duck Bill, Hand Forged Steel Pick, Painted Iron Parts, Rock Maple dles.

e	ŀ	I	in-	2		
			***	4	5	6
				4	4 1/2	5
				2 1/2	2 1/2	2 1/2
				114	118	122

Nos. ..... Length Handle, Feet... Diameter Handle, Inches Weight Per Dozen, Lbs.... 40.00 39.00 Per Dozen ...... \$37.80

#### TIMBER CARRIERS



Steel Swivel Bolt

Japanned Malleable Iron Clasp, Crucible Steel Duck Bill Hooks, Rock Maple Handles,

Per Dozen

No. 425-4 ft. x 2 1/2 in. Handle, Weight Per Dozen 

eter, Weight Per Dozen 48 Lbs...... 8.80

These carriers are fitted with swivel to permit carrying timber through narrow passageways. For handling rail-road ties, telegraph poles, timbers, etc. Will grapple any thing from 3 to 16 inches.

# PEAVEY AND CANT HOOK HANDLES

the same of the sa									
Selected Rock	Maple, 21/2	in.	Diameter						
Nos	703	704	705	706					
Length, Feet	4	4 1/2	5	5 1/2					
Weight Per Dozen, Lbs.	46	51	56	61					

Per Dozen ...... \$8.60

9.50

10.60

11.70

# LOAD BINDERS

DENJAMIN OPEN

Malleable Iron

For Binding Logs, Lumber, Hay, Pipe and Loads of Every Description. Per Dozen

# WOOD SPLITTING WEDGES



No. 1515—Straight Bit

Solid Cast Steel, Fluted, Oil Finish.

Weight, Lbs	3 4	5
	1/2 8 1/2	9
Head, Inches 1	1/2 1 1/4 1	34
Bit, Inches	2 2 1/8 2	3/8
Each \$0		70
20 THE STATE OF THE STATE OF	1865 (1968)	

These wedges are thicker than those known as falling wedges. They are mainly used for splitting logs, the various widths of wedges being adapted for woods of varying hardness.

# COAL WEDGES



No. 272—Standard Pattern

Solid Cast Steel, Black Oil Finish

Weight, Lbs	2	2 1/2	3
Length, Inches	9 1/2	9 %	10 1/2
Size Steel, Inches	1 1/8 x 1/8	1 1/4 x1	1 % x1 %
Each	\$0.35	.45	. 55

#### STONE WEDGES



No. 402—Short Pattern

Solid Cast Steel, Black Oil Finish.

Weight, Lbs	2	3	4	5
Length, Inches	4 %	5 1/2	6 1/4	7
Size Steel, Inches	1 1/2	1 5%	1 %	1 7%
Each	\$0.45	.60	. 75	.90

# HANDLE WEDGES

SYRACUSE



Before Driving.

After Driving.

# HANDLE WEDGES

GRADY





Non-Rusting Metal

Non-Corrosive, Tremendous Holding Qualities on account of the Hook Corrugation.

No. 1—For Hammers and Hatchets.

No. 2—For Axes and Sledges.

1.20

Three Dozen in Display Carton.

#### SAWYER PATENT





No. 1742.

No. 1747

#### SAWYER REGULAR

Illustrations Half Size. For Large Axes

No. A-2 in. Long, 1½ in. Wide, Wt. Per Gross 11½ Lbs......\$7.00

One Dozen in a Box.

For Axes and Large Hammers

No. B—1½ in. Long, 1 in. Wide, Wt. Per Gross 5½ Lbs......\$5.75

Three Dozen in a Box.



in a

For Axes and Large Hammers

Three Dozen in a Box.

For Hammers and Hatchets

Three Dozen in a Box.





## For Hatchets and Hammers

Three Dozen in a Box.

For Light Hatchets and Hammers

Three Dozen in a Box.



# BLACKSMITHS ANVIL TOOLS

TOP AND BOTTOM SWAGES



#### Solid Forged Steel, Oil Finish

Size Given is Measured Across Face. Top Swages have Oval

Eye for Handle.

Used for Shaping, Sizing and Smoothing Rough Iron.



No. 30.

9-Top Swa	ages			
14 36 2 1/2 2 1/2	2 1/2	58 2 ½	3 1/4	3 14
\$1.60	3 % 1 . 80	4 1/4	4 %	4 %
14 36 2 2	3/2 2 1/2	2 1/2	2 1/2	2 1/2
3	3	3 1/2	4	4 1/2
	14	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	14

## TOP AND BOTTOM FULLERS Solid Forged Steel, Oil Finish

Sizes Given are Measured Across Face.

Top Fullers have Oval Eye for Handle.

Used for Necking and Grooving Forgings, and also for Drawing Down a Forging to a Smaller Size



No. 16.

No. 15.

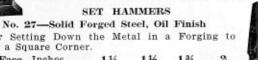
No. 15-T	op Ful	llers			
Size, Inches 1/4 Weight Each, Lbs 2 1/2	36 2 %	2 34	2 34		
Each \$1.35	1.35	1.35	1.40	1.40	1.60
Size, Inches	3	3 1/2	3 1/2	4	4 1/2
No. 16-Bot	tom F	ullers			
Size, Inches       34         Weight Each, Lbs       2 1/4         Each       \$1.35	2 1/4	2 1/4	2 1/2	2 1/2	2 1/2
Size, Inches	2 1/2	1 14 3 1/2	1 36 3 1/2	1 34	4 1/2



#### SQUARE FLATTERS

No. 13-Solid Forged Steel, Oil Finish

For Smooth and Finishing Flat Forgings. 2 246 3 31/2 Size Face, Inches. . Weight Each, Lbs. 2 3 1/4 4 1/2 6 Each ...... \$1.50 2.00 2.55 3.50



SET HAMMERS

For Setting Down the Metal in a Forging to Form a Square Corner. Size Face, Inches.... 114 Workt Each, Lbs... 2 Weight Each, Lbs... 3 1/4 4 1/2 Each . . . . . . . . . . . \$1.20 1.55 1.90 2.40



# HARDIES

No. 18-Solid Forged Steel, Oil Finish

This Tool Sets in the Anvil and is Used for

Cutting off For	gings.			
Size Shank, In-	ches	. 1/2	96	34
Width Bit, Inc	ches	. 1 %	1 %	1 %
Weight Each,			1	1 1/4
Each		80.70	. 70	. 80
Size Shank, Inches	76	1	1 36	1 14
Width Bit, Inches	2	2 1/4	2 1/4	2 1/2
Weight Each, Lbs	1 34	2	2 1/2	2 %
Each	\$0.90	1.00	1.30	1.40

# BLACKSMITHS TOOLS

ROUND PUNCHES



No. 23—Solid Forged Steel, Oil Finish

Size Point, Inches	1/2	96	34
Stock at Eye, Inches	1 1/4	1 1/4	1 0
Length, Inches	7 %	7 %	7.34
Weight Each, Lbs	2	2 1/8	2 1,0
Each	\$1.05	1.30	1.35

#### COLD CUTTERS



No. 5-Solid Forged Steel, Oil Finish

Size	1	1 16	1 14	1 34
Cutting Edge, Inches		1 1/4	1 1/4	1 %
Length, Inches	4 7/8	5 1/4	5 %	6 1/4
		1 1/2	2	2 1/2
Each	\$1.05	1.05	1.05	1.30
Size	1 1/2	1 94	1 34	2
Cutting Edge, Inches	1 1/2	1 %	1 34	2
Length, Inches		6 %	7 3%	7.9%
Weight Each, Lbs		4	5	6
Each	\$1.50	2.00	2.45	3.90

#### HOT CUTTERS



No. 6-Solid Forged Steel, Oil Finish

Size	1	136	1 14	1 36
Cutting Edge, Inches	1 %	1 1/2	1 5%	1 %
Length, Inches	6	6 %	7.3%	7 %
Weight Each, Lbs	1	1 1/2	2	2 1/2
Each	\$1.05	1.05	1.05	1.30
Size	1 1/2	1 %	1 34	2
Cutting Edge, Inches	2	2 1/8	2 1/4	2 1/2
Length, Inches	8 1/4	9	9 34	10 %
Weight Each, Lbs	3	4	5	6
Each	\$1.50	2.00	2.45	3.00

#### BUTTON HEAD RIVET SETS



No. 106-Solid Forged Steel, Oil Finish

Size	36	3/2	98	34	78
Diameter Cup, Inches	34	7/8	1 1/8	1 1/4	1 1/2
Length, Inches	6 1/4	6.34	7	7	7
Weight Each, Lbs	3 1/2	3 1/2	5 1/2	5 1/2	7
Each	\$2.70	2.70	3.95	3.95	5.05

Size indicates rivet for which tool is intended.

#### CREASERS

No. 33-Forged Steel, Natural Finish Size, Inches. 34 Each ..... \$1.00 1.00 1.00 1.00

One-half Dozen in a Box.

#### FORE PUNCHES



Forged Steel, Natural Finish

Per Dozen ....\$9.00 No. 34-Assorted 4 to 41/2 in. Long. One-half Dozen in a Box.

# FARRIERS PRITCHELS



# FARRIERS BUFFERS



Forged Steel, Natural Finish

No. 39—6 in. Long. Per Dozen
One-half Dozen in a Box.

# FARRIERS SOLE KNIVES



Forged Steel, Polished Face

One-half Dozen in a Box.

# TIRE MEASURING WHEELS



Very Handy for Accurately Measuring the Length of Tires. Drop Forged Steel Wheel, Graduated to ½ of an Inch.

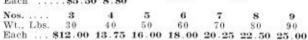
One in a Box.

#### ANVILS EAGLE

#### Tool Steel Face

One-Piece Face, Perfectly Welded, true and hard temper that will not come off or settle.

Horn of tough untempered steel.



#### ARM AND HAMMER BRAND



#### Wrought Iron Body, Tool Steel Face

Unequaled for superior shape, graceful design, stability on the block and absence of superfluous weight in base.

Nos	80	100	125	150	175	200	250	300
Weight, Lbs.	80	100	125	150	175	200	250	300
Per Pound .							8	0.30

# FORGES

#### CHAMPION EUREKA GEARED



Champion Eureka Cut-Geared Forge with larger hearth than is usually put on low-priced forges, but it is our desire to give the user a forge beyond the ordinary.

These improved forges are equipped with a cut-geared crank-driven blower, helical gearing being used to give smooth running and noiseless operation. The gear ratio gives 48 revolutions of the blast wheel to one turn of the crank, making a strong, steady, high pressure blast with smooth easy

sure blast with smooth easy turning—crank turning either direction. The gear case is oil-tight and dust-proof, giving modern advantages over the old lever types of forges, making it especially desired for general medium light work, such as Repairers, Garages, Farmers, etc.

	With Shield	Each
No.	147-Hearth 22 in., Fan 8 in., Height 30 in.,	
	Weight Each 85 Lbs	4.00
	With Half Hood	Each
No.	148-Hearth 22 in., Fan 8 in., Height 30 in.,	
	Weight Each 90 Lbs\$2	7.00

#### CHAMPION EUREKA GEARED AGRICULTURAL

Champion Eureka Agricultural Forge is equipped with a cut-geared crank-driven blower, helical gearing being used to give smooth running and noiseless operation. The gear ratio gives 48 revolutions of the blast wheel to one turn of the crank, making a strong, steady, high pressure blast with smooth easy turning—crank turning either direction. The gear case is oil-tight and dust-proof, giving modern advantages over the old lever and wheel type forge, making them very satisfactory forges for general light, and medium reservers.



No. 145.

general light and medium repair work, such as Garages, Farmers, or any place where a light portable forge is desired.

#### CHAMPION MIDWAY



#### With Cast Iron Hearth

The Champion "Midway" or Cross Spiral-Geared Forge has direct drive gearing. It is a well built, strong and substantial Forge, suitable for Boilermakers, Bridge Builders, Railway Contractors, Miners, etc.

#### With Half Hood

No. 73—23x35 in. Diameter Hearth, 10 in. Fan, 30 in. High, Weight 255 Lbs... \$40.00

#### With Shield

# BRICK CHISELS

KRAEUTER



No. 502-Single Bevel

Drop Forged Steel, Natural Black Finish, with Polished Edges.

Width, Inches	3	3 14	4
Length, Inches	6 34	6 34	7
Weight Each, Lbs	1 1/4	1 3/8	1 %
Per Dozen	\$7.00	7.50	9.50

After this tool is trip hammered, it is die forged to give it graceful lines. The line of the back is perfectly straight.

One-half Dozen in a Box.

# STAR DRILL HOLDERS

DIAMOND N



The taper shank of the drill point is carefully machined to fit the holder. The traverse hole in the handle is to admit a tapered pin which drives out the point when it is to be removed. The advantages in this drill over the one-piece regular drill is that in the smaller sizes, a better grip can be had, and a harder blow can be struck.

No.	201—Holder Only, without Points	
No	2018—Set, Consists of 1 Holder, 1 Ejector 6 Assorted Drill Points, 1 Each 1/4, 1/4, 1/8, 1/8, 1/8, 1/8, 1/8, 1/8, 1/8, 1/8	Per Set and and

#### Extra Drill Points for Diamond N Drill Holder

#### BRICK DRILLS

"DIEXCO" EXTENSION



#### Turned from Solid Bar Tool Steel

Carefully tempered so as to give correct combination of hardness for the cutting edges and sufficient ductility to prevent breaking under the hardest blow of hammer.

Nos	2	3	4	5
For Hole, Inches	78	11	3/8	1
Take Gas Pipe, Inches	1/8	1/4	38	1/2
Per Dozen	\$6.00	6.00	6.00	6.00
Nos		6	7	8
For Hole, Inches		1 1/4	1 1/2	2
Takes Gas Pipe, Inches		3/4	34	1
Per Dozen		\$8.40	18.00	24.00

These Drill Heads are threaded to fit the threaded end of gas pipe of any convenient length.

One Dozen in a Box.

# BRICK AND STONE DRILLS

DIAMOND FOUR POINT STAR



High Grade Octagon Drill Rod

Fitted for Uniformity and Special Heat Treated.

#### 8 Inches Long

Diam. Face, Inches 14	ye.	3%	re.	3/2
For Expansion Bolt, Inches	51040400	20.92	20,000	1/4
Weight Dozen, Lbs. 1 1/2	1 1/2	2 1/4	2 1/4	3 1/4
Per Dozen	8.25	8.25	8.70	9.65
Diam. Face, Inches	56	34	7/8	1
For Expansion Bolt, Inches	3/8	1/2	5%	4.4
Weight Dozen, Lbs	4	5 1/2	8 %	13
Per Dozen	\$11.65	13.70	15.30	17.00

#### 12 Inches Long

Diam. Face, In.	1/4	25	36	τĪσ	1/2	5%
	1 1 1/3 \$8.50	2 1/4 8 . 50	3 ½ 8.50	3 ½ 9 . 00	1/4 5 10.00	3% 6 ½ 12 . 00
Diam. Face, In			76	1	1 1/8	1 1/4
For Expansion Bo	lt, In,	1/2	. 58	0.00	94	2.2
Wt. Dozen, Lbs		8 1/4	13	19	2.5	30
Per Dozen			16.00	18.00	24.00	30.00

#### 18 Inches Long

Diam. Face, In. 1	4 fe	3/8	70	1/2	56
For Expansion Bolt, In Wt. Dozen, Lbs. 1 Per Dozen \$11	% 3 ½	5 1/4 11 . 00	5 1/4	$7\frac{1}{2}$ 12.50	10 %
Diam. Face, In.	4 %	1	1 1/8	1 1/4	$1\frac{1}{2}$
For Expansion Bolt, In	14 20	28 22.50	38 28.00	50 35.00	68 56.00

#### 24 Inches Long

Diam, Face, In. %	72	1/2	5/8	3/4	7/8
For Expansion Bolt, In		1/4	3/8	1/2	56
Wt. Dozen, Lbs. 8	8	9 14	14	20	27
Per Dozen \$13.50	14.00	15.00	17.50	20.00	22.50
Diam. Face, In	1		1 1/4	1 1/2	2
For Expansion Bolt, In.		34		1	
Wt. Dozen, Lbs	38	5.0	63	75	96
Per Dozen	\$25.00	32.00	40.00	62.00	120.00

# MARBLE DRILLS



No. 10—For Brace

Tool Steel, Natural Finish, Hand Forged.

# BULL POINT BARS



For Breaking Concrete Side Walks, Walls, Etc. High Grade Octagon Steel, Oil Finish.

Nos	378A	378B	378C	37SD
Diameter, Inches	34	1	1 1/4	1 34
Length, Inches	18	18	24	30
Per Pound				. 80 . 25

12

.60

.95

# STONE CUTTERS TOOLS HAMMER HEAD POINTS



No.	132-	-Extra	Quality	Steel
		****		

No. 132-	-Extra	Qt	ialit	y	Steel
Natural	Finish.	9	in.	L	ong.

Diameter Stock, Inches..... Weight Per Dozen, Lbs..... Per Pound ...... 80.60

#### MALLET HEAD POINTS



#### No. 136—Extra Quality Steel Natural Finish, 9 in. Long.

Diameter Stock, Inches..... 54 Weight Per Dozen, Lbs..... Per Pound ..... \$0.95

#### HAMMER HEAD PITCHING TOOLS



#### No. 133—Extra Quality Steel Natural Finish, 8 in. Long.

Width Blade, Inches..... 1 11/2 Weight Per Dozen, Lbs..... 15 .70 Per Pound ...... \$0.70

#### PLAIN HEAD CHISELS



#### No. 130-Extra Quality Steel Natural Finish, 8 1/2 in, Long.

Width Blade, Inches . . . . . . . 1 1/2 144 Weight Per Dozen, Lbs. . . . Per Pound ,..... 80.60 . 60 . 60

#### MALLET HEAD CHISEL



#### No. 134-Extra Quality Steel Natural Finish, 8 1/2 in. Long.

Width Blade, Inches . . . . . . . 1 36 1 1 14 Weight Per Dozen, Lbs. . . . . Per Pound ..... 80.95 .95 95

#### TOOTH CHISELS



#### No. 135—Extra Quality Steel Natural Finish, 8 1/2 in. Long.

Width Blade, Inches..... 1 1 36 134 Weight Per Dozen, Lbs... Per Pound ..... \$1.10 1.10 1.10

# PLUGGING CHISELS



#### Forged Steel, Natural Finish

Per Dozen No. 36-10 in. Long. % in. Stock, 1/4 in. Cutting 

#### COLD CHISELS

#### KRAEUTER DREADNOUGHT DIEMAKERS



#### No. 330-Forged Nickel Steel

Perfect Temper, with Edges that Will Last; Black Body, Polished Head and Point.

Cut, Inches	10	3/4	16	3/8	1/2
Stock, Inches	13	1/4	ra	3/8	10
Length, Inches	5	5	5	5	6
Weight Dozen, Lbs	1/2	3/4	1 34	1%	2 %
Per Dozen		3.00	3.50	3.80	4.50
Cut, Inches	contractor	56	34	7/8	1
Stock, Inches		1/2	5%	34	7/8
Length, Inches		6 1/2	7	8	8 1/2
Weight Dozen, Lbs		4	6 34	111/2	15
Per Dozen		\$5.75	6.50	8.50	10.80
% to % in., One Dozen	; Balan	ce, One	half D	ozen in	a Box.

#### EXTRA LONG



#### Forged Steel, Natural Finish

Extra Quality Finish, Tempered, Polished Bit.

Nos	10	20	30	40	50	60
Length, Inches	10	12	12	18	24	24
Width, Inches	1/2	5%	34	3/4	34	1
Wt. Dozen, Lbs	9	13	18	30	38	66
Per Dozen	\$4.00	6.00	7.50	12.00	15.00	24.00
On	e-half	Dozen	in a 1	Box.		

# ROUND NOSE CHISELS KRAEUTER



#### No. 331—Highest Grade Dreadnought Nickel Steel

Black Body, Polished Head and Point.

Cut, Inches	1/8	10	1/4	100	3/8	1/2
Stock, Inches	1/4	26	3/8	1/2	5%	94
Length, Inches	5	5	5	5 34	6 1/4	7
Wt. Dozen, Lbs.	34	1 14	1 %	3 %	6 1/4	9 1/2
Per Dozen	\$3.00	3.50	4.00	5.00	6.50	9.50
1/8 to 1/4 in., One	Dozen;			One-half	Dozen	in a
		Box.				

# DIAMOND POINT CHISELS

KRAEUTER



No. 332—Highest Grade Dreadnought Nickel Steel

Black Body, Polished Head and Point.

Cut, Inches .... Stock, Inches ... 14 Length, Inches ... 5 5 5 5 % 7 Wt. Dozen, Lbs. 弘 1 14 1% 3.34 6 14 Per Dozen .... \$3.00 3.50 4.00 5.00 6.50 9.50  $\frac{1}{8}$  to  $\frac{1}{4}$  in., One Dozen;  $\frac{5}{16}$  to  $\frac{1}{2}$  in., One-half Dozen in a Box.

Kraeuter Dreadnought Chisels are forged under drop hammers from an extremely high grade tool steel, the analysis and specifications of which have been proved to give the best results.

# CAPE CHISELS

#### KRAEUTER



No. 335—Highest Grade Dreadnought Nickel Steel

Black Body, Polished Head and Point.

Cut, Inches.... Stock, Inches . . Length, Inches. 5 1/2 5 1/2 5 1/2 6 1/2 7 1/2 3/4 1 14 2 6 1/4 9 1/2 Wt. Dozen, Lbs. 3 % 14 Per Dozen.... \$3.00 3.50 4.00 5.00 6.50 9.50 12.00 1/4 to 1/4 in., One Dozen; 1/8 to 1/4 in., One-half Dozen in a

# ROUND NOSE CAPE CHISELS

#### KRAEUTER



No. 345-Highest Grade Dreadnought Nickel Steel

Black Body, Polished Head and Points.

Cut, Inches	16	34	36	14
Stock, Inches		1/2	56	34
Length, Inches	5 1/2	6	6 1/2	7
Wt. Per Dozen, Lbs	2	3 3/4	6 34	9 1/2
Per Dozen	84.25	5.75	6.50	9.75
1/8 in., One Dozen; 1/4 to 1/2	in., O	ne-half D	ozen in	a Box.

# KEY LIFTING CHISELS



#### Forged Steel, Natural Finish

Hardened and Tempered, Polished Head and Bit.

Nos	134	135	136
Size, Inches	3/8	1/2	5/8
Length, Inches	5 1/2	6	6 1/2
Weight Per Dozen, Lbs	4	5	6
Per Dozen	\$3.50	4.50	6.00
One-half Doz	en in a	Box.	

# KEY SEATING CHISELS



Forged Steel, Natural Finish Hardened and Tempered, Polished Head and Bit.

Nos	142	143	144
Size, Inches	3/8	1/2	5/8
Length, Inches	5 %	6	6 1/2
Weight Per Dozen, Lbs	4	5	.6
Per Dozen	\$3.50	4.50	6.00
One-half Doz	zen in a	Box.	

# ELECTRICIANS CHISELS



#### For Floor Work

	de Tool Steel,	Properly Ha	rdened	and Tem-
pered, Natura				Per Dozen
No. 75-7 in.	Long, 2 1/2 in.	. Wide Face,	Weight	Per
Dozen 7	Lbs			\$9.00

This chisel has an extremely thin blade, which cuts tongue without marring floor board.

One-half Dozen in a Box.

#### FLOOR CHISELS

B. M. CO.



#### No. 60—Drop Forged Steel

Natural Finish, Polished Blade, ¾ in. Octagon Stock. For cutting, not for prying. Used by carpenters, plumbers, electricians and other mechanics.

Per Dozen



#### No. 65-Drop Forged Steel

Natural Finish, % in. Octagon Stock.

Used by carpenters, plumbers, electricians and other mechanics.

## PLUMBERS WOOD CHISELS

KRAEUTER



#### No. 403-Highest Grade Crucible Steel

Perfect Temper, Highly Polished Face, Bevels and Bit, Black Grip.

Cut, Inches	34	1	134	1 1/2
Stock, Inches	1,6	78	58	3/4
Length, Inches	11	11	11	11
Weight Dozen, Lbs	7	10 1/2	111/2	15
Per Dozen	87.50	9.00	9.50	12.00

Made with beveled edges and bit, making it easier to operate in heavy wood. The handle is slightly raised to clear the hand when using.

One-half Dozen in a Box.

#### PLUMBERS WOOD GOUGES



#### Outside Bevel

High Grade Forged Steel, Natural Finish, Hardened and Tempered.

Per Doze

# PLUMBERS SPRING PACKING CHISELS



#### Spring Steel

High Grade Crucible Steel, Hardened and Tempered.

Per Dozen

Per Dozen

# PLUMBERS CALKING CHISELS

STUB



#### For Calking Soil Pipes and Water Mains

High Grade Octagon Steel, Hardened and Tempered.
Per Dozen
No. 306—% x.3 in. Blade, % in. Stock, 6½ in. Long,
Weight Per Dozen 9 Lbs.......\$4.00

#### REGULAR



For Calking Soil Pipe, Water Mains, etc.

#### SHORT



#### For Calking Close to One Edge of Hub

#### RIGHT AND LEFT DOUBLE OFFSET



#### For Calking in Inaccessible Places

High Grade Octagon Steel, Hardened and Tempered.

Per Dozen

No. 313R—Right Hand, ¾x¼ in. Face, 8½ in. Long,

in. Stock, Weight Per Dozen 15½ Lbs.....\$6.50

No. 313L—Left Hand, ¾x¼ in. Face, 8½ in. Long,

in. Stock, Weight Per Dozen 15½ Lbs..... 6.50

# PLUMBERS YARNING CHISELS

REGULAR



#### For Calking Oakum Into Joints

High Grade Octagon Steel, Hardened and Tempered.
Per Dozen

No. 308—¾ x ½ in. Point, 5 in. Blade, 10½ in. Long
Over All, Weight Per Dozen 10½ Lbs.......\$4.00

#### EXTRA LONG



#### For Working Oakum Into Joints by Hand

High Grade Octagon Steel, Hardened and Tempered.
Per Dozen
No. 309—% x<sub>1/2</sub> in. Point, 10 in. Blade, 15 ½ in. Long.
Over All, ¾ in. Stock, Wt. Per Dozen 8 ½ Lbs.. \$5.00
All Above, One Dozen in a Package.

# PLUMBERS GASKET CHISELS

LONG



#### With Curved Face

# PLUMBERS BENDING PINS

DOUBLE END



#### For Bending Lead Pipe

Round Steel, Forged, Natural Finish.

#### SINGLE END

#### For Bending Lead Pipe

Round Steel, Forged, Natural Finish.

# PLUMBERS CHIPPING KNIVES



 No. 337—Riveted Leather Handle, Crucible Steel Blade

 Length Blade, Inches.
 5

 Weight Dozen, Lbs.
 6 ½

 Per Dozen
 \$10.00

# PLUMBERS TAP BORERS



#### Regular Pattern

Tapered, Half Oval Heavy Tool Steel Blade, Beveled Cutting Edges, Bent Shank Passes Through the Handle Headed with Washer, Hardwood Handle. Per Dozen

One Dozen in a Box.

# PLUMBERS TURN PINS

HARDWOOD

For Expanding Ends of Lead Pipe and Traps

Nos.	301-1	301-2	301-3
Diameter, Inches	2.36	2 %	2 %
Length, Inches	3 34	4 1/4	4 %
Weight Dozen, Oz	3	4 1/6	4 34
Per Dozen	\$3.00	3.00	3.00

# LEAD DRESSERS



# LEAD PIPE EXPANDING PLIERS



For Turning Out Collars on Lead Pipes and Traps No danger of Stocking or Bending the Pipe when using these Pliers. Made of Heavy Sheet Steel. No. 354-11 in. Long, Weight Each 1% Lbs......\$3.25 One in a Box

# PLUMBERS SCRAPERS

PEXTO



Oval Blade Extra Quality Forged Steel, Tempered, Polished Hardwood Handle. No. 11-5 in. Long, Weight Per Dozen 1 1/4 Lbs.....\$4.60

# One-half Dozen in a Box. BIBB SEAT REAMERS



Regular Style With Cone threaded on inside, for Bibbs with outside thread. Handle and Cone, Brass Nickel Plated, Tool Steel Cutters.

No. 417-With 4 Cutters, One Each for 38, 32, 58 and % in. Bibb, Weight Each 12 Oz ............\$2.00

## FORCE CUPS



Firm, yet Flexible and Durable. With Suction Valve and 30 in. Wood Handle.

Per Dozen No. 40-4 in. Diameter.....\$6.00 No. 60-6 in. Diameter ..... 7.50 One Dozen in a Bundle.

# PLUMBERS LADLES



No. 373—Single Lip Steel Bowls, Handles Carefully Welded On. 3 35 Size, Inches..... 2½ 3 1 1/4 2 1/4 4 14 10% Holds Lead, Lbs. . 3 1 gill 11/4 gill Holds Liquids.... 1 1/2 oz. 2 1/4 oz. % pt. Wt. Dozen, Lbs... 6 6 14 11 26 Per Dozen ..... \$4.50 6.60 7.75 8.80 11.50 6 - 7 8 9 10 Size, Inches..... 40 Holds Lead, Lbs.. 1434 21 27.36 5.0 1 % 2 1/2 3 1/2 5 Holds Liquids, Pts. 11/4 152 32 74 88 128 Wt. Dozen, Lbs... Per Dozen . . . . . . \$14.00 33.00 41.00 56.00 68.00

#### SOLDER OR MELTING POTS

	Good	Q	ıal	lit;	y	G	r	ay	Iron,	Wrought	Iron	Bail
	Size,									5		6
	Capa	city		L	18				7	13 1/2	1	18 1/2
	Wt. 1	Cac	h.	L	bs	3.			2 1/2	2 34		4 1/8
									\$0.50	. 60		.70
Size, Inches									7	8		10
Capacity, Lbs.										46		92
Weight Each.										9		16
Each										1.50		2.30

# SOLDERING COPPERS POINTED TYPE

Draw	n Coppe	r, Forg	ed		
Nos	1/2	1P 1 .50	1 ½ P 1 ½ .67	2P 2 .85	2 1/2 P 2 1/2 1 · 03
Nos	3	3 ½ P 3 ½ 1 . 35	4P 4 1.45	5P 5 1.93	6P 6 2.41
Nos		7	8P 8 3.08	10P 10 3.85	12P 12 4.62

Note-Prices of Soldering Coppers Subject to Market Changes.

#### HATCHET TYPE



With Swivel Handle Drawn Copper, Forged ..... H2 H4 Weight Pair, Lbs..... 1.15 1.45

Numbers stamped on soldering coppers indicate pounds per pair, order by number.

#### RADIO TYPE



For Radio and Electrical Work Pure Copper, Tinned, Hardwood Handle.

Per Dozen .....\$3.00 No. A-9 % in. Long...... One Dozen in a Box.

#### SOLDERING SETS MILLERS FALLS



For Household and Radio Work

With this Set the repairing of small leaks in the radiator, water pump, household utensils, etc., is easily and quickly done.

Set consists of Soldering Copper, Bar of Solder, Box of Resin and a Scraper. Per Set No. 2-Weight Each 15 Oz..... One Set in a Wooden Box.

### SOLDERING COPPER HANDLES



Soft Wood, Wired Per Dozen No. 200-5x1% in., Weight Per Dozen 2 Lbs..... \$0.60 Three Dozen in a Box.

#### BRASS BLOW PIPES



For Gas Seamless Brass, Ground Seated Valve made from Solid

Bar Brass. SE SE 141/2 Length, Inches . . . . . . . . 12 1/2 14 1/8 5% Bore, Inches . . . . . . . . . . . . . 1/4 Weight Each, Lbs..... 2 14 1 Each ..... \$4.75 8.00 One in a Box.

#### TINNERS SNIPS

#### WISS

Wiss Snips are best by actual test, superior in quality and construction. A piece of finest crucible bar steel welded to the inside of the blades, gives these Snips their perfect lasting cutting edge—an edge that will not break

#### WISS REGULAR STRAIGHT



Forged Steel, Crucible Steel Laid Blades Natural Finish Handles, Polished Head.

Nos	6 36	7	8	9
Length, Inches	15 %	14 1/2	13 34	12 1/2
Cut, Inches	4 1/2	4	3 1/2	3
Weight Each, Lbs	3 1/2	3 1/8	2 1/2	2
Each	\$4.32	3.62	2.88	2.55
Nos	10	11	12	13
Length, Inches	111/2	9 1/2	8	7
Cut, Inches	2 1/2	2 1/4	2	2
Weight Each, Lbs	1 1/2	34	1/2	1/3
Each	\$2.34	1.78	1.45	1.34

One in a Box.



Forged Steel, Crucible Steel Laid Blades

Natural Finish Handles, Polished Head; Will Cut Curved as Well as Straight Work.

Nos	17	18	19	100
Length, Inches		13 1/2	12 1/2	111/2
Cut, Inches	4	3 1/2	3	2 1/2
Weight Each, Lbs	2 34	2 1/2	1 34	1 1/2
Each	\$3.94	3.28	2.96	2.63

These snips have beveled blades and straight cutting edges for cutting circles, scrolls, etc., and can be also used for regular work.

One in a Box.

#### WISS CIRCULAR BLADE



Forged Steel, Crucible Steel Laid Blades

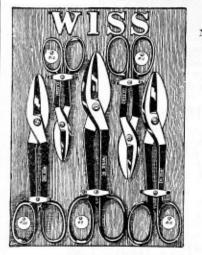
Natural Finish Handles, Polished Head, for Cutting Curved Work.

Nos.	6 1/4 CB	7CB	8CB	9CB	10CB
Length, Inches					1136
Cut, Inches			3 1/2	3	
Weight Each, Lbs	3 34	3	2 1/4	2	1 1/6
Each	\$6.22	5.08	4.32	3.96	3.62
	ne in a				

Hand of Snips—Confusion often arises as to the meaning of the terms Right and Left Hand as applied to Snips. Right Hand are made like Bench Shears and Left Hand opposite. That is, when held in the right hand the lower blade is on the right side of the shears in Right Hand Shears, and on the left side in the Left Hand Shears. Left Hand only are shown in the cuts. Left Hand Snips are more generally used, and are invariably sent.

#### TINNERS SNIPS

WISS DISPLAY BOARDS



Each No. 35 Display Board -Consists of 5 High Grade Wiss Tinners' Snips, as Listed Below. Mounted on a 12x 16 in. Wooden Panel, Green Mission Finish, with a Wooden Easel Ready to Place on Counter or in Window, Handsome, Simple and Practical, Weight Complete 7 1/2 Lbs. . . . . . . . . . . . . . . \$10 . 70

#### Contents of No. 35 Display Boards

1-No.	9	Regular	Pattern,	12 1/2	in.	Long.	3	in.	Cut.
1-No.	10	Regular	Pattern,	111/2	in.	Long.	2 1/2		
1-No.	11	Regular	Pattern,	9 1/2	in.	Long.	2 14	in.	Cut.
1-No.	12	Regular	Pattern.	8	in.	Long.	2	in.	Cut.
1-No.	100	Combina	tion Pat'r	n, 11	1/2 if	n. Long	, 2 1/2	in.	Cut.

#### SAMSON STRAIGHT



#### Forged Steel, Crucible Steel Laid Blades Japanned Finish Handles, Polished Head.

Nos	46	47	48	49
Length, Inches		14 1/6	14	12%
Cut, Inches	4 1/2	4	3 1/2	3
Weight Each, Lbs	3 %	3	2 %	1 3%
Each	\$4.00	3.30	2.60	2.30
Nos		50	51	52
Length, Inches		1134	10 16	8 1/2
Cut, Inches		2 1/6	2 1/4	2
Weight Each, Lbs		1 1/6	1 1/8	56
Each		\$2.10	1.60	1.30
	ne in a B			

#### HERCULES COMBINATION



#### Forged Steel, Crucible Steel Laid Blades Japanned Finish Handles, Polished Head

6.00 3036	Transfer of Care	THE TREET	
Nos	147	148	149
Length, Inches	14 1/2	13 1/6	1236
Cut, Inches	4	3 1/2	3
Weight Each, Lbs	3	2 14	2
Each 8	3.80	3.20	2 85

These snips are made so as to easily cut circles, scrolls, etc., and are equally adapted to the same class of work as the regular snip. The jaws are beveled with straight cutting edges which allows the material to pass freely when cutting curves or changing direction of cut.

One in a Box.

# TINNERS SNIPS

SAMPSON CIRCULAR



Forged Steel, Crucible Steel Laid Blades Japanned Finish Handles, Polished Head.

Nos	47C	48C	49C	50C
Length, Inches	14 1/2	14	13 %	11
Cut, Inches	4	3 1/2	3	2 1/2
Weight Each, Lbs	3	2 %	1 7%	1 1/2
Each	\$4.60	4.00	3.60	2.30
0	ne in a l	Box.		

SEARIGHT BARTLETT COMPOUND LEVER



Drop Forged, High Grade Crucibie Steel

Tempered	Through	hout,	Polished	Blad	les, Ja	panned
Handles.	_					
Nos		*7	8	10	12	14
Length, Inche		7	8	10 1/2	12	14
Length Cut. In			1 %	2 1/2	3	3 1/2
Weight Each,	Lbs	10	5/8	1 1/6	1 7%	2 1/2
Each .		83 00	4 50	6.75	9.00	10.50

The compound lever action gives an evenly distributed cutting strain from a close throat start to the finish at the point.

\*Pocket Size, Pressed from Crucible Sheet Tool Steel.

One in a Box.

TROJAN IMPROVED



With Tailor's Shear Bows

High Grade Drop Forged Steel, Japanned Handles, Polished Blades.

No. 80—12 in. Long, 2 ½ in. Cut, Capacity 26 Gauge, Weight Each 2 Lbs......\$3.75

These snips have sharp points and are used for cutting straight or curved lines and for scroll on cornice work, One in a Box.

BERRIDGE DOUBLE CUTTING



With Pipe Crimpers

Forged from High Grade Steel, Carefully Tempered and Hardened, Polished Head, Black Finish Handles.

No. 2-13 1/2 in, Long, Weight Each 2 1/4 Lbs..... \$4.00

Adapted to cutting off the bottoms of pails, cans, etc., and suitable for cutting round or square work. The Crimping Attachment is designed for crimping any kind of sheet metal, pipe, round or square. The parts are interchangeable. The crimping jaws and blades are of high grade steel.

One in a Box.

# AUTOMOBILE SNIPS

PEXTO POCKET



Solid Forged Steel

Steel Laid Blades, Polished Head, Blued Handles.

A very useful little snip that just fits the vest pocket. Used by automobilists, plumbers, electricians and mechanics.

Six in a Box.

# HOUSEHOLD SNIPS



Steel Forged

Forged from Solid Steel Bars, Blued Finish Handles, Polished Blades.

Per Dozen

One-half Dozen in a Box.



Hardened Edges, Black Japanned Finish, Polished

Blades.

One-half Dozen in a Box.

# DENTAL SNIPS



Forged Steel

Nickel Plated Blades, Black Japanned Handles, Crucible Steel Inlaid Blades, Fitted with Screw and Nut.

Per Dozen

Made especially for dentists' and jewelers' work. An extra fine snip for cutting precious metals, templates and light sheet metal.

One-half Dozen in a Box.

# GASOLINE TORCHES

CLAYTON & LAMBERT



Single Needle Burner

Heavy Gauge Brass Reinforced Tank, Automatic Brass Pump, Funnel Shaped Bottom, Large Filler Plug, with Removable Soldering Copper Hook

This Torch has been a favorite with mechanics for many years.

It produces over 300 degrees more heat than any similar torch and burns low test fuel perfectly,

Each No. 32-Capacity 1 Quart, Weight Each 41/4 Lbs...\$18.00 One in a Box.

#### CLAYTON & LAMBERT

#### Improved Single Burner

Heavy Gauge Brass Reinforced Tank, Automatic Brass Pump, Funnel Shaped Bottom, Large Filler Plug, with Removable Soldering Copper Hook.

This Torch leads all other single burner torches and burns low test fuels perfectly.

Each

No. 38-Capacity 1 Pint, Weight 

One in a Box.





#### Patent Double Needle Burner

Designed for extra heavy work requiring intense heat and burns perfectly in wind or zero weather.

Heavy Gauge Brass Reinforced Tank, Automatic Brass Pump, Funnel Shaped Bottom, Large Filler Plug.

The Patent Double Needle Burner has maximum generating power producing a perfect fire, burning low test fuel, has removable hook.

No. 206-Capacity 2 Qts., Weight Each 734 One in a Box

#### CLAYTON & LAMBERT

# Patent Double Needle Burner

Heavy Gauge Brass Reinforced Tank, Automatic Brass Pump. Funnel Shaped Bottom, Large Filler Plug, with Removable Soldering Copper Hook.

The Patent Double Burner has maximum generating power.

No. 208-Capacity 1 Qt., Weight Each 5 1/8 Lbs. \$10.00

One in a Box



# GASOLINE TORCHES

CLAYTON & LAMBERT



#### Patent Double Needle Burner

Heavy Gauge Brass Reinforced Tank, Automatic Brass Pump, Funnel Shaped Bottom, Large Filler Plug, with Removable Soldering Copper Hook.

The Patent Double Burner has maximum generating power.

Each

No. 210-Capacity 1 Pt., Wt. Each 4 Lbs......\$9.50 One in a Box.

#### CLAYTON & LAMBERT

# Single Needle Burner

Heavy Gauge Brass Reinforced Tank, Automatic Brass Pump, Funnel Shaped Bottom, Large Filler Plug with Removable Soldering Copper Hook. A medium priced Torch having burner tube with Under-Generator.

The Burner is made of Bronze Metal and produces a steady blue flame. The needle which is sharp pointed is fitted with Stuffing Box to prevent leakage.

No. 130 - Capacity 1 Qt., Weight Each 4 Lbs. . . . \$17.00

One in a Box.



#### CLAYTON & LAMBERT

#### Single Needle Burner



Heavy Gauge Brass Reinforced Tank, Automatic Brass Pump, Funnel Shaped Bottom, Large Filler Plug, with Removable Soldering Copper Hook

A Strong Blast Heat is generated by this powerful burner, the resulting blue flame is a joy to the user.

A surprisingly low amount of gasoline is required compared with the results obtained in heat effice.

No. 132-Capacity 1 Qt., Wt. One in a Box.

#### CLAYTON & LAMBERT

## Open Type Generator Burner, for Gasoline

Bronze Metal Burner, with Open Type Generator that injects the air which mixes with the gas, producing a steady blue flame.

The Hook on Burner is removable and can be laid aside when not needed.

Air pressure required to operate the torch is quickly produced by the Automatic Brass Pump,



Each

# Polished Heavy Gauge Brass Tank

No. 144-Capacity 1 Quart, Polished Brass with

Hook and Support for Holding Soldering Cop-No. 146-Capacity 1 Pint, Weight Each 3 Lbs.,

Otherwise Same as No. 144...... 14.00

One in a Box.

# GASOLINE TORCHES

CLAYTON & LAMBERT FLAT TANK



#### Patent Double Needle Burner

Heavy Gauge Brass, Reinforced Body, Automatic Brass Pump in Handle, Removable Soldering Copper Hook.

Particularly adapted for the use of automobile mechanics and electricians as it fits snugly in the tool box.

No. 48D—Capacity 1 Pt., 5 in. Long, 8½ in. High, 1½ in. Thick, Weight Each 4¼ Lbs. \$24.00 One in a Box.

# PARTS FOR CLAYTON & LAMBERT TORCHES



#### Always State Number of Torch When Ordering.

Burner Complete \$ 9.00	Dip Tube
Burner Body, old style 4.00	Filler Plug90
Back Burner, new style 4.15	
Burner Body, new style 3.25	
Tank Complete12.00	
Tank Only 9.50	
Pump Complete 3.70	Burner Hook (screw in)25
Drip Cup and Screw 50	Stuffing Box for Burner .40
Burner Nipple50	Cleanout Plug06
CONTRACTOR OF THE PROPERTY OF THE SECTION OF THE SE	Wind Shield

#### DREADNAUGHT

#### Service with Safety

Produces a Broad Hot Flame. Equipped with Automatic Cleaning Needle, Installed in Valve Stem.

Brazed Steel Tank, Patent Burner, Patent Pump Clasp with Soldering Copper Hook. Each

#### DREADNAUGHT

#### For General Use

Brazed Steel Tank, Copper Plated, Powerful Burner, Patent Pump Clasp, with Soldering Copper Hook. Each

No. 31—Capacity 1 Quart, Wt. Each 4½ Lbs......\$7.00

## DREADNAUGHT AUTOMATIC



#### Operates Automatically Without Pump

Brazed Steel Copper Plated, with Soldering Copper Hook.

No. 8—Capacity 1 Pint, Wt. Each 1% Lbs. \$4.00 One Dozen in a Box.

# BLOW TORCHES

LENK AUTOMATIC



#### Generates Its Own Power

Brass, Nickel Plated, Non-Leakable, Burns Denatured Alcohol.

No. 66—6 1/8 in. Long. 2 % in. Wide, Weight Each 8 Oz.......\$1.75

No pumping, no priming, blows itself, flame heat 1400° Fahrenheit.

Six in a Display Box.

#### SPARTAN

#### Brass, Nickel Plated, Burns Alcohol

The mechanics choice for long continued service.

One in a Box.



#### IMP

# THE STATE OF THE S

#### Entirely Automatic

Starts with a Match. Perfect Bunsen Flame of Over 2000 Degrees. No Pumping, no Blowing, Uses Gasoline. Brass, Nickel Plated. For Jobs Requiring a Melting, Fusing or Brazing Heat.

Each

#### CHAMPION

#### Built To Last a Lifetime

Brass, Nickel Plated, Operates About Three Hours on One Filling. Produces 1700 Degree Flame, Blows Itself, Starts in 20 Seconds, Mechanically Fool-proof. All Parts Interchangeable. Equipped with Detachable Shield Protecting Blast from Drafts on Outdoor Work.



Each

One in a Box.



# HANDY

# Brass, Nickel Plated

Produces 1200 Degree Needle Flame. Handy for Any Soldering Purpose. Used by Electricians, Mechanics, Radio Fans, Motorists, Plumbers, Jewelers, Opticians, etc. Complete with Mouth Piece and Rubber Tube.

# GASOLINE FIRE POTS



#### CLAYTON & LAMBERT

#### With Pump in Tank

Heavy Tinned Drawn Steel
Tank, Base is Protected with
Patent Cushion Band, Fitted
with Patent Double Blunt
Needle Burner Having Great
Generating Power and Giving
Satisfactory Results Under the
Most Severe Conditions. The
Fire is controlled by the Lower
Needle and the Upper Needle is
used to clear the gas orifice
should it become clogged. A
pair of Coppers can be heated
and a pot of metal melted at the
same time.

No. 1—Capacity 1 Gallon, Weight Each 14 Lbs. . . \$28.00 One in a Box.

### CLAYTON & LAMBERT COIL Fitted with Air Valve and Bulb

Rust Proof Drawn Steel Tank, Heavily Tin Coated Inside and Out, Preventing Rust Working Up Into Coil and Burner which Prevents Clogging. Patent Three Piece Coil Cup and Shield of Heavy Steel. This Fire Pot will withstand hard service, produce the hottest fire and uses very little fuel. The cost of upkeep is less than that of any other style of Fire Pot.

No. 12—Capacity 1 Gallon, Weight Each 12½ Lbs.. \$20.20

Each sallon, Lbs. \$20.29 One in a Box.



# CLAYTON & LAMBERT COIL With Pump in Tank

Rust Proof Drawn Steel Tank, Heavily Tin Coated Inside and Out, Preventing Rust Working Up into Coil and Burner, Preventing Clogging. Patent Three Piece Coil Cup and Shield of Heavy Steel. This Fire Pot has the same improved features as the No. 12 illustrated above except it being equipped with Automatic Brass Pump in tank, eliminating the use of bulb.

No. 22—Capacity 1 Gallon, Weight Each 12½ Lbs....\$20.60 One in a Box.

# PLUMBERS FURNACES

H. J. & C.

#### With Rubber Bulb and Safety Air Valve

Heavy Steel Reservoir, Attractively Enameled, Patent Air Valve Prevents Back Flow of Gasoline Into the Bulb and Safeguards the Operator from Accidental Explosions and fires. Heavy One-Piece Metal Shield, Heavy Cast Brass Spider Providing Substantial Support for the Malleable Iron Top Plate and Shield.

No. S5848—Capacity 7 Pints. Weight Each 15 Lbs., \$20,20



# SOLDERING COPPER FURNACES

REGO

#### Fire Brick Lined



Galvanized Iron Hood, Cast Iron Base,

Burns with a mixture of air and gas in proportion of about 92% of air and 8% of gas, giving an excellent heat. They are lined with fire brick which keeps the heat within the furnace and prevents the same from radiating.

Nos	
Burners	
Width, Inches	6 1/2 8
Length, Inches	12 131/4
Height, Inches	7 1/2 7 1/2
Weight Each, Lbs	9 13
Each	

#### REGO COMBINATION

#### For Heating Soldering Coppers, Glue, Etc.

Cast Iron Hood. The Lid can be removed to permit the use of a glue pot. For natural or manufactured gas.



Nos	1C	2C
Burners	1	2
Width, Inches	6 %	8
Length, Inches	12.	13 1/2
Height, Inches	6 16	6 1/4
Weight Each, Lbs,	2 16	2.34
Each	\$4.50	6.00

# GAS BENCH FURNACES

JOHNSON



#### No Forced Air Blast Required

Will heat-treat carbon steel tools, such as dies, gears, taps, reamers and chisels. A blower is unnecessary, which eliminates the use of a muffler.

Equipped with powerful atmospheric burners, each having a separate pilot light and shut-off valve.

Will produce a heat of from 1600 to 1800 degrees F. in the fire box.

Each

The shelf in the rear of the fire-box forms a rest and protects the points of soldering coppers. These Furnaces have patented curved shape hood, which forces a return blast over the tops of the irons or parts being heated.

# CARBORUNDUM STONES

Carborundum is an artificial abrasive or grinding material, a product of the electric furnace. It is very much harder than any other known abrasive, which gives it great durability. It is made up of small sharp crystals that are just brittle enough to break slightly when in use. The sharp edges of the crystais cut clean and fast, while the britteness, by constantly presenting fresh cutting edges, prevents glazing. The combination of these qualities gives to Carborundum its unquestioned title of being one of the best of all known abrasives.

# BENCH

# CARBOBUNDUM Fine Grit

Nos	F115	F118	F133	F121	F124	F142
Length, Inches	8	8	7	6	6	4
Width, Inches	2	2	2	2	2	1 34
Thickness, In	1	34	1	1	5/8	1/2
Wt. Each, Lbs	1 1/8	7/8	1	7/8	5/8	3/8
Each	\$1.50	1.35	1.25	1.15	.90	. 65

Medium Grit						
Nos	M116	M119	M134	M122	M143	
Length, Inches	8	S	7	6	4	
Width, Inches	2	2	2	2	1 %	
Thickness, In	1	34	1	1	1/2	
Each	\$1.50	1.35	1.25	1.15	. 65	

	Coa	rse Grit		
Nos	C117	C120	C135	C123
Length, Inches	8	8	7	6
Width, Inches	2	2	2	2
Thickness, Inches	1	3/4	1	1
Each	\$1.50	1.35	1.25	1.15
One in	a Box	Six in a Ca	rton.	

#### COMBINATION STONES



One Side Coarse Grit, Other Side Very Fine Grit

Nos	108	109	110	111	112
Length, Inches		6	7	5	4
Width, Inches		2	2	2	1 %
Thickness, Inches.	1	1	1	34	5%
Weight Each, Lbs.		34	1	1/2	1/2
Each		1.25	1.50	1.00	. 85
		Six in	a Carton	50	

#### ROUND COMBINATION BENCH STONES



One Side Coarse Grit, Other Side Very Fine Grit Each No. 107-4 in. Diameter, 1 in. Thick, Weight Each One in a Box, Six in a Carton.

#### AXE STONES

Uniform Grit, Cutting	Fast			
No	195	1		. 1
Length, Inches	2 1/2			1
Width, Inches	2 1/2	All I	- Toolwess (	-
Thickness, In	1/2	All .		2000
Wt. Each, Lbs	3/4	V		
Each	80.45	200	A STATE OF THE PARTY OF THE PAR	
One	in a Box,	Six in a	Carton.	

# MACHINISTS SPECIAL



Extra Hard, for Cutters, Reamers and Lathe Tools No. 292-Fine, 4 in. Long, 1 in. Wide, 1/2 in. Thick, . . . . . . . . \$0 . 55 Weight Each 2 1/2 Oz ..... One in a Box, Six in a Carton.

#### SLIP STONES



For Sharpening Gouges and Other Round Edge Tools

180	181	182	183
Fine	Medium	Coarse	Fine
4 16	4 1/4	4 1/6	4 1/2
2 1/4			1 34
$\frac{58 - 10}{100}$	5h - h	7.63	16-16
36	36		3/4
\$0.90	.90	. 90	- 65
	Fine 4 ½ 2 ½ 5% – %	Fine Medium 4 ½ 4 ½ 2 ⅓ 2 ⅓ 58 - ⅓ 5% - ⅓ 36	Fine Medium Coarse $4\frac{1}{2}$ $4\frac{1}{2}$ $4\frac{1}{2}$ $4\frac{1}{2}$ $2\frac{1}{2}$ $2$

One in a Box, Six in a Carton.

#### POCKET HONES



Mounted on Display Board

Very Attractive and Sure to Increase Sales,

Per Box of 2 Dozen No. 149 - 3x%x% in., for Sharpening Pocket Knives and Small Tools, Put Up in a Neat Buff Colored Carton in a 10x12 in. Display Box with Easel Back, Wt. Per Box 1% Lbs......84.80

#### STICKS







Coarse, Medium and Fine

When ordering always s	tate Grade,	also Sty	le and I	Length.
Squar	res, 4 in, 1	Long		
Size, Inches 14	36	1/2	5%	34
Size, Inches 34 Each \$0.5	50 .50	.50	.55	. 55
	res, 6 in. I			
			97	1
Size, Inches 38 Each \$0.7	72	78_	24	.85
Each \$0.7		. 70	. 13	. 00
	gles, 4 in. l			
Size, Inches 14	36	36	% .70	.70
Size, Inches 34 Each \$0.0	.65	. 65	.70	.70
Trian	gles, 6 in. 1	ong		
Size. Inches 34	14	54	34	1
Size, Inches 34 Each \$0.8	85 .85	. 95	. 95	1.00
	ounds, 4 in			
Size, Inches 14			56	34
Each \$0.0	5 .65	. 65	.70	.70
	ounds, 6 in.			
Size, Inches 36	36	96	34	1
Each	.85	. 95	.95	1.00
Rour	ds, 4 in. L	ong		
Size, Inches 14	96	1/2	98	34
Size, Inches 34 Each \$0.7	0 .70	.70	.75	.75
Roun	ds, 6 in. L	ong		
Size, Inches %	16	54	34	1
Each \$0.9	5 .95	1.00	1.00	1.05

Six in a Box.

# OIL STONES

#### INDIA

India Oil Stones possess the characteristics of hardness, sharpness and toughness and in addition they possess absolute uniformity. They are especially adapted to the quick sharpening of all tools. All India Stones are filled with oil which insures a moist oily sharpening surface.

#### INDIA REGULAR BENCH



Medium, Fine or Coarse Grit

Medium Grit Furnished	Unless	Otherwise	Order	ed.
Nos		1/2 2	3	29
Length, Inches	8	7 6	4	6
Width, Inches	2	2 1 %	1	2
Thickness, Inches	1	1 34	1/2	1
Weight Each, Lbs	1 1/2 1	1/4 3/4	1/4	1 1/8
Each \$1	1.50 1	.25 1.00	.60	1.15
One	in a Bo	X.		

#### INDIA REGULAR COMBINATION



With	One	Face	Me	di	um	and One	Coarse	Grit	
Nos						. OC	1 1/2 C	2C	29C
Length, Incl	hes					. 8	7	6	6
Width, Inch	es					8	2	1 %	2
Thickness,	Inche	8				1	1	3/4	1
Weight Eac	h. Lì	s				1 1/2	1 54	34	1 1/8
Each						\$2.00	1.75	1.35	1.50
			On	0	in :	Box			

#### INDIA REGULAR SLIPS



Medium, Fine or Coarse Grit

Medium Grit Furnished Unless	Otherwise	Ordered	
Nos,	13	14	15
Length, Inches	4 1/2	4 1/2	4 1/2
Width, Inches	1 34	1 %	1 34
Thickness, Inches	1/2 X 1/6	%x1/6	Mx l
Weight Each, Lbs	4	3 1/2	2
Each	80.65	.65	.65
Twolve in a Re	14		

# INDIA SPECIAL GOUGE SLIPS



Made in Fine Grit Only
For Gouges and All Curved Cutting Edges. Each
No. 21—6 in. Long, 2 in. Widest End, 1 in. at Small
End, Edges Taper % to % in., Wt. Each 7 Oz...\$1.50
One in a Box.

#### HARD ARKANSAS BENCH



Selected Fine Grain

For use of engravers, patt	ern mak	cers, s	urgeons	, fine
wood workers and makers and	users o	of fine	tools.	They
impart a cutting edge unequalle	d by any	other	stone.	
Nos	5HB	$6\mathrm{HB}$	7 HB	SHB
Length, Inches	5	6	7	8
Width, Inches		2	2	2
Thickness, Inches	$\frac{34}{4} - 1$	$\frac{34}{4} - 1$	34-1	34-1
Weight Each, Lbs	7/8	1	1 1/8	1 1/4
Each		6.00	7.00	8.00
One in a	Box.			

# OIL STONES LILY WHITE WASHITA



			-		_	
Uniform	in	Texture,	Free	from	Foreign	Substance

Nos	<b>6L</b>	7L	8L
Length, Inches	6	7	8
Width, Inches	2	2	2
Thickness, Inches	% to 1	% to 1	34 to 1
Weight Each, Lbs	1	1 1/8	11/4
Each	\$0.75	. 85	1.25
One in a I	Box.		

#### No. 1 WASHITA



#### A Medium Priced Stone for General Use

Nos	6 W	7W	8W
Length, Inches	6	7	8
Width, Inches	2	2	2
Thickness, Inches	% to 1	% to 1	% to 1
Weight Each, Lbs	1	1 1/8	1 14
Each	80.45	.55	. 75
One in a	Dox		

#### QUEER CREEK



#### Can Be Used with Oil or Water

A Hard Medium-	coarse	Grain	Stone for	Rough	Work.
No					SQC
Length, Inches					
Width, Inches					2
Thickness, Inches					% to 1
Weight Each, Lbs					1 1/4
Each					\$0.40
	One in	a Cart	on.		

#### No. 1-WASHITA MOUNTED



#### Nicely Finished Hardwood Boxes

Nos	6M	7M	811
Length, Inches	6	7	8
Width, Inches	2	2	2
Weight Each, Lbs	1 1/8	1 1/4	1 %
Each	80.70	. 80	1.10
One in a Ro	v		

# HARD ARKANSAS PENKNIFE PIECES



#### Selected Fine Grain

Used extensively by pointed instruments and	y surg by dra	eons for ftsmen for	sharpenin drawing p	g small
Nos				4HP
Length, Inches				4
Width, Inches				1
Thickness, Inches				1/ _ 3/.
Weight Each, Oz				2 1/2
Fach				2 72
Each		*******		\$0.75
	Open S	tock.		

# OIL STONES

#### HARD ARKANSAS SLIPS



#### Selected Fine Grain

Used extensively in the higher arts and crafts for tools with special shaped edges; also for workers in hardwood for sharpening gouges and other curved edges on account of the long lasting edge produced.

No	4HS
Length, Inches	4
Width, Inches	$1\frac{3}{4} - 2$
Back Thickness, Inches	$\frac{3}{8} - \frac{1}{2}$
Edge Thickness, Inches	$\frac{1}{8} - \frac{3}{16}$
Weight Each, Oz	3
Each	

Note—Sizes of all Arkansas Oil Stones are approximate and there is a slight variation in dimensions given above. One in a Box.

#### LILY WHITE WASHITA SLIPS



For Sharpening Gouges, Chanel Knives, Etc.

Best Select														
No					 									4WS
Length, Inches					 	 								4
Width, Inches			1.		 			 						134 - 2
Thickness Back,														
Thickness Edge,	Inc	hes		-0.00	 	 000	 +				 	-	No. No.	1/8-1/4
Weight Each, Oz.					 									3
Each									,	ĸ.				\$0.30

Twelve in a Box.

# RUBBING BRICKS

CARBORUNDUM



Plain

For Dressing and Smoothing Granite, Marble, etc., and

tor acouring cascings	250,00					
Nos	211	212	214	215	222	223
Length, Inches	8	8	6	6	4	4
Width, Inches	2	2	2	2	2	2
Thickness, Inches	2	1	2	1	2	1
Weight Each, Lbs	2 1/8	1 14	2	1	1	1/2
Each	\$1.45	. 80	1.15	.60	.80	.50
	Open	Stock				

# RUBBING STONES



Fluted

For Ren Down All Ki	oving Form	and	Mould Vork.	Marks	and	Dressing
No						. 285
Cine Ymahan						8x2x2

Weight Each, Lbs.....

Each .....

# KITCHEN SANDSTONES

PIKE



#### Mounted in Wooden Case

A Selected Sharp-Gritted Sandstone for Kitchen Use, Shoe makers Knives, etc. Per Dozen No. 1K-8½ in. Long, 1½ in. Wide, Weight Per Dozen 11¾ Lbs. \$2.50

One Dozen in a Box.

### SCYTHE STONES CARBORUNDUM-ALOXITE



# Cuts Fast and Clean

Uniform Grit, Will Not Glaze.

190	191	192
10	12	10
1	1 14	1 1/4
34	13	12
6 34	11 1/2	1036
\$3.60	4.20	4.20
	10 1 34 6 34	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Aloxite Stones must not be classed with the ordinary scythe stone. The old style stones are merely sand stones and rub the edge on. Aloxite cuts fast and quick, the advantage is obvious.

One Dozen in a Display Box.

#### BLACK DIAMOND



#### Flat Octagon Shape

Very Fine Grit, Extremely Sharp, Fast Cutting. Gives a Fine Lasting Edge. Per Dozen Black Diamond—10½ in. Long, Weight Per Dozen 8½ Lbs. \$1.75

#### GREEN MOUNTAIN



Oval Shape

#### DARBY CREEK



Heavy Round Oval Shape Per 100

Darby Creek—9½ in. Long, a Coarse Fast Cutting
Sandstone Grit, Weight Per Hundred 180 Lbs.. \$21.50

Twenty-five in a Box.

#### ENGLISH ROUND



#### Round, Tapered Ends

1

#### BENCH OILERS

COPPERED STEEL

#### Wide Mouth, Interchangeable Spouts

Cold Rolled Steel .025 Gauge Body, Clock Spring Steel Bottoms, Seamless Drawn Steel Bodies, Heavy Rolled Threads, Double Seamed and Rolled Bottoms, Heavily Electro Copper Plated, Wide Mouth Opening.

Nos. 12 to 15A

Bent	Spout		
Nos	14	14-B	16
Capacity, Pints	1/3	1/2	1
Spout, Inches	9	9	9
Dome, Inches	3 1/2	3.34	4 14
Height, Inches	113%	115%	12 1/8
Wt. Dozen, Lbs	3	3 1/2	4
Per Dozen	\$6.50	8.50	10.50



#### Straight Spout

Nos	12	13	13-A	14-A	14-AA	15	15-A
Capacity, Pints	1/4	3/3	1/2	1/2	1/4	1	1
Spout, Inches	3	3	5	3	5	2	5
Dome, Inches	2.74	3 14	3 14	3.34	3 34	4 14	4 1/4
Height, Inches	4.7%	5 %				6 %	8 14
Wt. Dozen, Lbs.,	2 14			3 14		3 34	3 34
Per Dozen	\$4.50						
	One D	ozen i	n a Ca	arton.		000000	



# Brazed One-piece Heavy Sheet Steel Body

Tempered Spring Steel Bottom, Onepiece Steel Neck. Brass Spelter Brazed, Cut Leather Washer, Heavy Gauge Brazed Steel Spout.

Straight	Spout
	1001

MOS	1004	1704
Capacity, Pints	1/3	1/2
Diameter, Inches	3.3%	3 %
Length Spout, Inches.	4	4
Wt. Dozen, Lbs	4	4 %
Per Dozen	\$5.00	6.00
	Done	Chant



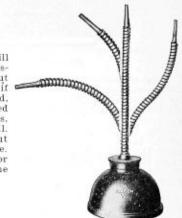
Bent	Spout		
Nos	1706	1809	1909
Capacity, Pints	1/2	34	1
Diameter, Inches		4 1/8	4 16
Length Spout, Inches	6	9	9
Weight Dozen, Lbs	4 %	5 76	6.34
Per Dozen,	86.50	8.00	9.00
One Dozen	in a Bo	Х.	

# BENCH OILERS

BEACON FLEXIBLE SPOUT

#### Coppered Steel

Seven in., Flexible, will reach the most inaccessible oil hole. The spout won't break or crimp if stepped on or dropped, Heavy Copper Plated Steel Can. Cut Threads, Wide Mouth, Easy to fill. By bending the spout you can oil anywhere. Especially adapted for automobile and machine work.



Nos	A	В	C
Capacity, Pints	1/4	1/6	1
Dome, Inches	3 1/2	3 %	4 14
Weight Dozen, Lbs	3 16	4	4 3/6
Per Dozen 8	87.80	9.60	10.08

One Dozen in a Box.

#### KOLAPS

#### The All Purpose Oil Can

Heavy Gauge Steel, Copper Plated.

Bottoms are crimped so that leakage is impossible.

Simple in construction, no springs, nothing to get out of order.

Easily reaches inaccessible places, ejects oil at all angles, solves the problem of efficiently lubricating any machine, at the same time saves



Nos	1465	1505
Capacity, Pints 1/3	1/2	1
Spout, Inches 4 1/2	6 1/6	1036
Dome, Inches 3 %	3 34	4 1/4
Weight Dozen, Lbs 3 1/2	4	4 1/4
Per Dozen \$9.00	10.00	12.00

When not in use, spout will fold against can, automatically shutting off flow of oil, and may be kept in tool box, occupying very little space. The spout can be moved to any angle and oils in any position.

One Dozen in a Box.

# AUTOMOBILE PUMP OILERS

WALL SUPERIOR

#### With Swivel Spout

Steel Copper Plated, Brazed Steel Spout, Metal Pump Plunger, removable Check Valve. Swivel Spout can be moved in any direction.

A feature of this Oiler is the removable check valve. It can be removed and cleaned when clogged with a chip or a thread of waste.





# CHACE OILERS



Stamped Tin Plate

Anti-Rust Finish, Tinned Spring Steel Bottom, Seamless Body.

Nos	00	0	1
Capacity, Oz	1	1 1/2	2 1/2
Spout, In	2 1/8	2 1/8	2 1/4
Dome, In	2 1/8	2 1/4	2 %
Height, In	3 34	4 1/8	4 1/6
Height Dome, In	1 36	1 34	2 1/4
Opening, In	5/8	5%	5%
Weight Dozen, Lbs	34	7/8	1 76
Per Dozen	\$1.00	1.25	1.50

Nos	2	3	4	5
Capacity, Oz	4	7	10	12
Spout, In	3 1/2	4 1/4	4 7/4	4 14
Dome, In	3 1/4	3 %	4 1/4	4 14
Height, In		7.86	8 3%	8 1/8
Height Dome, In		3	3 34	3 56
Opening, In		56	34	3/4
Weight Dozen, Lbs	1 %	2 3%	3	3 16
Per Dozen		2.25	2.75	3.50

One Dozen in a Carton.

# PHONOGRAPH OILERS

EAGLE

One Piece Body, Double Seamed Bottom

One Dozen in a Carton.



# RAILROAD OILERS

COPPERED STEEL

Lower half of bottom made in one piece, making leakage impossible. Large 1 1/4 in. Opening, Interchangeable Spouts, Union Connections Enabling Spout to be pointed in any direction.

Nos	10	11
Capacity, Pints	1	2
Spout, Inches	12	18
Diameter of Dome, In	3 14	4 1/8
Height Dome, In	5 1/8	5 3%
Height Over All, In	1734	23 1/2
Weight Dozen, Lbs	9	12
Per Dozen	\$14.00	18.00

One-half Dozen in a Box.

# IMPROVED COPPERED STEEL

One-half Dozen in a Box.

Lower half of bottom made in one piece, making leakage impossible. Improved style handle that comfortably fits the hand and evenly distributes the additional weight of the oiler. The spout is made with extra large opening to allow increased flow of oil. Spouts are interchangeable and are made with Union connections so they may be turned in any direction. 1% inch opening.

Nos	100	101	111
Capacity, Pints	1	2	4
Spout, Inches	12	12	12
Diam. Dome, In	3 1/4	4 1/8	5
Height Dome, In	5 1/8	5 1/2	7 %
Height Over All, In.	1734	17 %	19 1/2
Weight Dozen, Lbs	10	13 14	20%
Per Dozen	\$14.00	18.00	20.00



# ENGINEERS FILLERS



With 114 Inch Opening

Drawn from One Piece Extra Heavy Cold Rolled Steel, Copper Plated Inside and Outside, Highly Polished, Long Spout Opening.

Nos	19	210	211
Capacity, Pints	1	2	4
Diameter, Inches	4 1/8	5	6
Height Dome, Inches	4 1/8	5	6
Height Over All, Inches	6 1/2	4 1/2	5 %
Weight Dozen, Lbs	7 1/2	11	15 1/2
Per Dozen	\$14.00	20.00	24.00

The spout has a large opening and is connected close to the bottom of the can and at an angle to permit free flow of oil when tipped slightly forward.

One-half Dozen in a Box.

# TALLOW POTS

COPPERED STEEL



With 11/2 Inch Opening

Drawn from One Piece Extra Heavy Cold Rolled Steel, Copper Plated Inside and Outside, Highly Polished, Long Spout Opening.

The cover is fastened to handle with brass chain

Nos	212	213
Capacity, Quarts	1	2
Diameter, Inches	5	6
Height Dome, Inches	4 14	4 %
Height Over All, Inches	4 1/6	5 1/2
Weight Dozen, Lbs	1036	16
Per Dozen	\$21.00	25.00

# SAFETY CANS

JUSTRITE

No Waste or Leakage

Nozzle One Piece Heavy Bronze Casting with Two Spouts, One for Pouring and One for Filling.

Valve Stem has Airtight Seat Preventing Evaporation or Leakage.

If Gas is Generated by Excessive Heat, the Valve Releases and Allows it

Body Heavy Coated Leaded Plate.

Nos	08	18	28	38
Capacity, Quarts	1/2	1	2	4
Weight Each, Lbs	1 1/2	1 34	3 1/2	4 1/4
Each	\$1.80	2,00	2.50	3.00

One in a Package.

# BRICK TROWELS

ROSE



#### No. 110—Philadelphia Pattern

Extra Quality Cast Steel Blade, Carefully Tempered, Ground and Polished, Solid Shank, Hardwood Handle, Polished Steel Ferrule.

Length, Inches	10	10 %	11	1114	12
Width Blade, Inches.	5 1/8	5 %	5 1/4	5 %	5 1/2
Weight Dozen, Lbs	12 1/2	13	14	14 1/2	15
Per Dozen	\$28.00	29.00	30.00	31.00	32.00
	If Dozer				



#### No. 310-Philadelphia Pattern, Leather Handle

Extra Quality, Cast Steel Blade, Carefully Tempered, Ground and Polished, Solid Shank, 5 1/2 in. Handle, Polished Ferrule.

Length, Inches	1036	11	111/2	12
Width Blade, Inches	5 %	5 14	5 3/8	5 1/2
Weight Per Dozen, Lbs	13	14	14 1/2	15
Per Dozen	\$33.20	34.20	35.20	36.20
One-half 1	Dozen in	a Box		



#### No. 221-Wide Heel Pattern

Extra Quality Cast Steel Blade, Carefully Tempered, Ground and Polished, Solid Shank, Hardwood Handle, Polished Steel Ferrule.

Length, Inches	10 1/2	11	111/2
Width Blade, Inches	6	6	6
Weight Per Dozen, Lbs	141/4	1434	14 %
Per Dozen	\$30.00	31.00	32.00
One-half Doze	on in a R	nv	



#### No. 321-Wide Heel Pattern, Leather Handle

Extra Quality Cast Steel Blade, Carefully Tempered. Ground and Polished, Solid Shank, Polished Steel Ferrule. Length, Inches . . . . . . . . . . 10 1/2 11 111% Width Blade, Inches..... Weight Per Dozen, Lbs.... 6 6 6 143% 14 % 14 % Per Dozen .... .. \$34.00 35.00 36.00 One-half Dozen in a Box.

#### MARSHALLTOWN



No. 19W-Philadelphia Pattern

Flexible High Grade Crucible Steel Blade, Tempered. Ground and Polished, Hardwood Handle, Polished Steel Ferrule

Length, Inches	10 1/2	11	1136
Width Blade, Inches	5 %	5.1/2	5 34
Weight Per Dozen, Lbs	13	13 1/2	14
Per Dozen	\$24.00	24.00	24.00
One-half Doze		DX.	7.70

# BRICK TROWELS

MARSHALLTOWN



No. 19L-Philadelphia Pattern, Leather Handle One Piece Forged Highest Grade Crucible Steel Blade, Post and Tang, Oil Hardened and Tempered, Hand-Smithed, Taper Ground and Highly Polished, Natural Finish Post, Leather Wound Handle, 6 in. Long, Polished Steel Ferrule, 1 % in, Long,

Length Blade, Inches	101/2	11	111/6
Width Heel, Inches	5 %	5 1/2	5 34
Weight Per Dozen, Lbs	12 1/2	13 1/2	14 1/2
Per Dozen	\$27.00	27.00	27.00

One-half Dozen in a Box.

#### DISSTON



No. 12—Philadelphia Pattern Light Weight Flexible Crucible Steel Blade, Polished Heavy Steel Ferrule, Hardwood Handle. Length, Inches . . . . . . . . . . 10 1/2 11 1136 Length, Inches ..... 51/4 Width Blade, Inches ..... 51/4 5 1/2 5 % 14 14 1/2 28.50 29.00

One-half Dozen in a Box.

#### DISSTON IMPROVED



No. 36—Wide Heel Pattern
Light Weight Flexible Crucible Steel Blade, Taper
Ground and Polished, Heavy Steel Ferrule, Hardwood Handle.

Length, Inches ...... 10½
Width Blade, Inches ..... 6
Waight Pay Dozen Like 11 6 Weight Per Dozen, Lbs..... 14 14 Per Dozen ..... \$29.00 30.00

The steel tang is spiral shaped. The hardwood handle is forced onto the tang with a revolving motion at great pressure.

One-half Dozen in a Box.

#### STANDARD



No. 152—Philadelphia Pattern Forged Steel Blade, Tempered, Ground and Polished, Solid Shank, Hardwood Handle, Polished Steel Ferrule. Length, Inches..... 8 9 10 11 12 Weight Dozen, Lbs... 9 10 11 12 13 Per Dozen...... \$15.25 15.75 16.50 16.75 17.50

One-half Dozen in a Box.

#### HANDY



No. 170-Riveted Shank Cast Steel Blade, Hardwood Handle, Steel Ferrule, Weight Per Dozen, Lbs..... 6 Per Dozen ...... ..... \$4.00

One Dozen in a Box.

# PLASTERING TROWELS

MARSHALLTOWN FINISHING



#### Finest Quality Crucible Spring Steel Blade

Ground 23 Gauge in Center to 25 Gauge on Edge, Hardened Mountings, Full Polished Blade and Mountings, Ten Rivets, Plain White Handle.

Nos	MF3	MF6	MF7
Length, Inches	11	11 1/2	12
Width, Inches		5	5
Per Dozen	\$30.00	30.00	30.00
Average Weight Per 1	Dozen 13 l	Pounds.	
One-third Dozer	in a Box		

#### MARSHALLTOWN BROWNING



#### Flat Face, Crucible Spring Steel Blade

Ground Full Taper, Hardened Mountings, Full Polished Blade and Mountings, Twelve Rivets, Plain White Handle.

Nos,	MB3	MB6	MB7
Length, Inches	11	111/2	12
Width, Inches	4 %	5	5
Per Dozen	\$30.00	30.00	30.00
Average Weight Per I	ozen 14	Pounds.	

These Trowels are light in weight and very rigid. The handles are smooth turned and shaped for comfortable grip.

Marshalltown Trowels are produced for the craftsman who demands the best that is available. One-third Dozen in a Box.

#### DISSTON FINISHING TROWELS



#### No. 38-Special Shaped Handle

Crucible Steel Blade, 24 Gauge, Slightly Concaved, Ten Rivet Mounting, Specially Shaped Handle to Fit the Hand. 1112 Length, Inches . . . . . . . . . 10 32 11 4 1/2 4 18 Width, Inches ..... 12 1116 34.25 32.50 Per Dozen .....

Disston Trowels are made from the highest grade of crucible steel, carefully tempered and ground. The handles are mounted in the most approved manner.

One-half Dozen in a Box.



#### No. 28-Thin Blade, Ten Rivets

Highest Grade Crucible Steel Blade, 24 Gauge, Tem-

pered and Accurately Ground,	Louisnen	Wood Hen	uro.
Length, Inches	10 32	11	11 1/2
Width, Inches	4 1/2	4 %	4 13
Weight Dozen, Lbs	10 1/2	11	111/2
Per Dozen	\$29.50	32.00	33.70
One-half Doze	n in a B	OX.	

# PLASTERING TROWELS

DISSTON



No. 16-Western Pattern

Crucible Steel Tempered and Ground, Long Mounting with Shield, Tang Extends Through Handle, Fastened with Flush Barrel Nut, End of Handle Beveled for Thumb Rest, Seven Rivets, Spun Polished Handle.

Length, Inches	1032	1.1	11 1/2
Width Blade, Inches	4	4.5%	4 13
Weight Dozen, Lbs		12	12 1/2
Per Dozen	\$27.50	29.50	31.00

One-half Dozen in a Box.

#### STANDARD



No. 150-Regular Pattern

Cast Steel Blade, Tempered and Polished, Hardwood Handle.

Length, Inches	10	10 34	11	11 1/2	12
Wt. Dozen, Lbs		10	11	12	13
Per Dozen	814.25	15.00	15.75	17.00	18.50

One-half Dozen in a Box.

#### HANDY



#### For Home or Farm Use

Bright Steel Blade, Forged Steel Shank, Natural Wood Handle. Per Dozen No. 180-10 in. Long, Weight Per Dozen 10 Lbs.... \$4.00

One-half Dozen in a Box.

# CORNER TROWELS





Cast Steel Blades, Full Polished, Mounting Riveted to Blades, Hardwood Handles, Mortised and Fastened with Screws.

Per Dozen No. 65-Inside Angle, 6 in. Long, Weight Per Dozen No. 67-Outside Angle, 6 in. Long, Weight Per Dozen

One-half Dozen in a Box.

# POINTING TROWELS

DISSTON



No. 15-Regular Pattern

High Grade Crucible Steel Blade, Tempered and Polished, Solid Shank, Hardwood Handle, Steel Ferrule.

 Length, Inches
 5

 Weight Per Dozen, Lbs
 3 ½

 Per Dozen
 \$10.25

 5 12.00 11.00 One-half Dozen in a Box.





No. 55-Regular Pattern Cast Steel Blade, Tempered and Polished, Solid Shank,

Hardwood Handle, Steel Ferrule. 

 Length, Inches
 5

 Weight Per Dozen, Lbs
 3 ½

 Per Dozen
 \$7.20

 8.00 9.00





Bright Steel Blade, Natural Wood Handle

Per Dozen No. 160-5 1/2 in. Blade, Weight Per Dozen 3 1/2 Lbs., \$2.50 One Dozen in a Box.

# GAUGING TROWELS



Round Nose

High Grade Crucible Steel Blade, Tempered and Polished, Solid Shank, Hardwood Handle, Steel Ferrule. Per Dozen

No. 14-7 1/2 in. Blade, Weight Per Dozen 6 1/2 Lbs. . \$24.00 One-half Dozen in a Box.

# MARGIN TROWELS

DISSTON



Standard Pattern

High Grade Crucible Steel Blade, Tempered and Polished, Solid Shank, Hardwood Handle. 28 Length Blade, Inches..... 5 3.34 Per Dozen ..... \$7.50 7.50 One-half Dozen in a Box.

#### PLASTERERS MITERING TOOLS

GENUINE TYZACK



Right Flexible Reaf and Square End High Grade Sheffield English Steel, Carefully Tempered and Polished. Per Dozen No. C25-Assorted 1/2 to 1 in. Wide, Weight Per 

# WOOD FLOATS



Clear Seasoned Red Wood Square Edges, Smooth Finished, Wood Handle.

Per Dozen One-third Dozen in a Box.

#### CORK FACED



For Cement Workers and Plasterers

Selected Cork Face % in. Thick, Glued to Wood Back 1/2 in. Thick, with Smooth Wood Handle. No. 42-101/2 in. Long. 4 in. Wide, 11/4 in. Thick, One-quarter Dozen in a Box.

#### CORK FLOATS



Solid Cork

Smoothed on Both Sides for Plasterers Use. Nos. 5 Length, Inches ..... 11 12 Width, Inches Weight Per Dozen, Lbs..... 4 5 5 5 16 Per Dozen ..... 88.00 9.50 Open Stock.

# PLASTERERS ANGLE PADDLES



Seasoned Hard Maple Beveled to a Working Edge, 71/2 in. Long, 23/4 in. Wide.

Per Dozen No. 336-With Plain Edge . \$3.00 No. 337-With Inserted Bronze Blade . . . . . . . . 4.00 Weight Per Dozen 4 Pounds. One-half Dozen in a Box.

# PLASTERERS MITER RODS



With 45 Degree Angle

High Grade Crucible Steel, Tempered and Polished, Beveled on Long ...... 6
Length, Inches ..... 3½
Width, Inches ..... 3½
Per Dozen, Lbs ... 4½ Beveled on Long Edge. 3 1/2 3 1/2 3 % 6 7 1/2 9 Per Dozen ..... \$6.00 8.00 9.00 14.50 Length, Inches ...... 14 16 18 Width, Inches 4
Weight Per Dozen, Lbs. 10 ½
Per Dozen \$16.00 4 1/8 434 15 18 17.50 20.50 One-half Dozen in a Box.

Each

# PLASTERERS HAWKS

MARSHALLTOWN ALUMINUM



Hard Rolled Aluminum

Slightly Oval Face, Detachable Hardwood Handle, Patent Aluminum Flange 3% in. Diameter, 5 in, Detachable Handle with Threaded Bolt extends all the way through. Each Hawk supplied with soft rubber Callous Preventer.

Nos	1	2
Size, Inches		13 1/2 x 13 1/2
Weight Per Dozen, Lbs	2.5	. 27
Per Dozen	\$33.00	34.00

One-quarter Dozen in a Box.

#### WOOD



Thoroughly Seasoned Redwood

Dovetailed Wedge, Adjustable Softwood Handle.
Per Dozen
No. 22—13x13 in., Weight Per Dozen 23 Lbs.....\$15.00
One-third Dozen in a Box.

# CALLOUS PREVENTERS



#### For Use on Plasterers Hawks

Made of Sponge Rubber, Protect the Hands from Callouses.

No. 0—3% in. Diameter, ¼ in.
Thick, with 1¼ in. Hole
for Hawk Handle.....83.00

# PLASTERERS DARBIES

MARSHALLTOWN ALUMINUM



#### Hard Rolled Aluminum

Black Enameled Wood Rib, One Detachable Straight Enameled Wood Handle.

#### MARSHALLTOWN WOOD



#### Strong Grained Cedar

# PLASTERERS BRUSHES



Extra Extra

Finest Grade Special Selected Bristles,

No. 4-8 in. Wide......\$8.25

#### Special

Standard Selected Bristles.

#### Browning

Regular Mixed Bristles.
Each
No. 1—8 in, Wide......\$4.50

Six in a Box.

# PLASTERERS IMITATION TILE MARKERS



Polished Spring Steel Blade Hardwood Handle, Polished Steel Ferrule.

No. 1— ½ in Cutter, Weight Each 2 Oz...... 86.00 No. 2—2½ in Cutter, Weight Each 2½ Oz..... 6.00 One-half Dozen in a Box.

# BRICK JOINTERS



#### For Rodded Joints

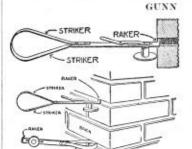
No. 302—8 in. Long. % in. at Center, Tapering to 1/8 in. at Both Ends, Weight Per Dozen 3 Lbs....\$8.00 One-half Dozen in a Box.



#### For "V" and Rodded Joints

Polished Steel, One End Diamond-Shaped and One End Round. Per Dozen No. 402—8 in. Long, ¾ in. at Center, Tapering to ⅓ in. at Both Ends, Weight Per Dozen 3 Lbs.... \$8.00 One-half Dozen in a Box.

# COMBINATION JOINT RAKERS



#### A Raker, Jointer and Striker Combined

The revolving wheel prevents wear and will not mar the work. Adjustable to any depth by means of a lever makes a smooth perfect raked out joint.

Per Dozen

No. 1—8½ in. Long, Rakes Joints ¼ to ½ in....\$6.00 One-half Dozen in a Box.

## CEMENT WORKERS TOOLS

#### ABRAM DOUBLE ACTING

The full lines on cut show the "Abram" Patent Automatic Wrist Motion Device in the position as being pushed from the operator, the device lifting the front edge slightly to prevent the trowel blade digging into the mortar.

The dotted lines show the device in the position as being pulled toward the operator, and the relation of the tool to the surface is reversed.

Thus by the mere act of pushing or pulling tool back and forth over the surface to be finished the "Wrist Motion" Device Automatically gives the blade the proper position for correct work.

Abram Tools are sold on the guarantee that one man can do more and better work with them than three men can do with ordinary tools. No user has ever disputed this claim, but many say they can do much more.

Cut Showing How the Wrist Motion Performs the Work.



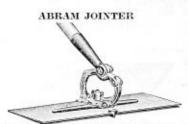
Highest Grade Trowel Steel, Polished

Weight 5 Lbs. \$7.50

The capacity of this tool in comparison with old style
methods are astonishing. This tool does away with backaches, bruised knees, tired and aching muscles, knee pads
and foot boards.

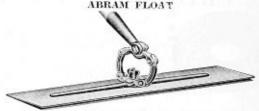


Double Action



Highest Grade Trowel Steel, Polished

No. 2—16 in. Long, 5 in. Wide, Steel Mounting Rib, 6 ft. Extra Quality Ash Handle, Wrist Motion Adjustable to Any Desired Angle by Wing Nut, Bronze Metal Joint, Making Clean Straight Cut,



# PARTS FOR ABRAM CEMENT WORKERS TOOLS

Each



No. 59—24 in. Long, 6 in. Wide, Weight Each 4 Lbs. \$5.00 JOINTER BLADES



 EDGER BLADES



For No. 30 Edger

#### JOINTER ATTACHMENTS



For Use with No. 2 Jointer

Any number of these V-shaped Joints can be attached to the No. 2 Jointer at the desired distances converting this tool into a Driveway Groover or for making parallel joints any distance within range of the blade.

No. 43-Nickel Plated Iron, Weight Each 7 Oz..., \$0.90

# CEMENT WORKERS TOOLS

#### EDGERS



	Iron, Nickel Plated Each
No.	1-6 in. Long, 3 in. Wide, 3 in. Radius, Weight
	Each 1½ Lbs\$1.20
No.	3-6 in. Long, 3 in. Wide, 4 in. Radius, Weight
	Each 1½ Lbs
No.	1A-With One Square End, Otherwise Same as
	No. 1 1.20
No.	1B-6 in, Long, 2 1/4 in. Wide, 3/8 in. Radius with
	One Square End, Weight Each 1½ Lbs 1.20 Two in a Box.



	Iron, Nickel Plated E	ach
No.	2-8 in, Long, 21/2 in. Wide, 1/2 in. Radius,	
	Weight Each 2 Lbs	.20
No.	2A-8 in. Long, 3 in. Wide, 3 in. Radius	
	Weight Each 1 1/8 Lbs 1	.20
	Two in a Box.	



		fron, Nickel Plated	Each
No.	5-7 in. Long, Turned Edge,	3 in. Wide, ¾ in. Radius Weight Each 1½ Lbs Two in a Box.	s, 1½ in. \$1.70



			Ire	m, N	cke	Plateo	St		Eac	h
No.	<b>6B</b> —6	in.	Long.	2~%	in.	Wide,	1/2	in.	Bevel,	
	Weight	Ea							\$1.2	U
			Used	for	Bev	el Edg	es.			
				Two	in a	Box.				



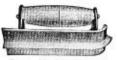
			Iron,	N10	kel Pla	ated		Each	í.
No.	7A-6	in. Lor	ıg, 1½	in.	Wide,	Weight	Each	11/4	
	Lbs							\$1 . 20	,
			Tw	0 1	n a Box	X.			

# CURB EDGERS



			Iron, Nickel Plated	Each
No.	38-7 % Edge,	½ in. ⅓ in.	Long, 3½ in. Wide, 2 in. Turned Radius, Weight Each 2½ Lbs: Two in a Box.	<b>\$2.50</b>

#### JOINTERS



Iron, Nickel Plated	Each
No. 20—6 in. Long, 3 in. Wide, One End Straight to Cut Joint in Sharp Corners, Cuts Thin Groove, ½ in. Deep for Sidewalks, Weight Each 1¼ Lbs	
No. 20B-6 in. Long, 2 ¼ in. Wide, Cuts Thin Groove ½ in. Deep, Weight Each 1 ½ Lbs	
No. 21—6 in. Long, 3 in. Wide, Cuts Heavy Groove for Driveway	
Two in a Box.	



	Each
No.	22-6 in. Long, 3 in. Wide, Cuts Thin Groove for
	Sidewalks, ½ in. Deep, Weight Each 1¼ Lbs\$1.20
No.	22A-Cuts 1/8 in. Groove, Otherwise Same as
	No. 22 1.20
	Two in a Box.



	Iron, Nickel Plated E:	ach
No.	24-7% in. Long, 2 in. Wide, % in. Radius, Cuts	
	Thin Groove for Sidewalks, % in. Deep, Weight	
	Each 1% Lbs\$1	.20
	Two in a Box.	



Iron, Nickel Plated	Each
No. 28-6 in. Long, 4% in. Wide, Cuts Thin Groov	'e
% in. Deep, Weight Each 1 % Lbs	\$2 . 00
Two in a Box.	

# INSIDE SQUARE ANGLE



Iron, Nickel Plated	ach
No. 30 ½ —6 in. Long, 1 ½ in. Sides, Weight Each 1 ½ Lbs	

#### OUTSIDE SQUARE ANGLE



					Iroı	1, N	viel	cel	P	lated			Each
No.	311/2-	-6	in.	Lo	ng.	Si	des	1	1/2	in.	High,	Weigh	t
	Each	1 1/2	L	bs,						+3.53			.\$1.20
					Т	wo	in	a	Bo	x.			

# CEMENT WORKERS TOOLS

OUTSIDE ROUND ANGLE



	Iron, Nickel Plated Each
No.	33-8 in. Long. 214 in. Sides, 34 in. Radius,
	Weight Each 1 1/2 Lbs
No.	33½-8 in. Long. 2¼ in. Sides, 2 in. Radius,
	Weight Each 1% Lbs
	Two in a Box.

#### STEP NOSING TOOL



		Iron, Nickel Plated	Each
No.	12—6 Each	in. Long, ¾ in. Nosing, 4 in. Top, Weight 2 Lbs	2.50

#### GUTTER TOOL



			1	ron, N	ickel 1	Plated	Each
No.	<b>40</b> —9 Each	2 1/2	Lbs				 Weight \$2.50

#### CORRUGATING TOOL



		Iron, Nickel Plated Ea	ch
No.	75 - 6	in. Long. 4 in. Wide, Makes 10 Grooves	
	1/8 in.	Deep, % in. Apart, Weight Each 2 Lbs \$3.0	00
		Two in a Box.	

#### FLOOR EDGER



		Polished	I Steel	Blade,	Hard	wood H	andle	Each
No.	165 -	-5 1/2 in.	Long.	4 in. '	Wide,	Weight	Each	7/8
	Lbs.							\$1.00
			Si	x in a	Box.			

#### SANITARY BASE TOOL



Polisl	hed Steel Blade,	Hardwood Handl	e. Each
		s, 1 in. Radius, W	
Each 2 1/2	Lbs Six in a		\$3 . 50

# CEMENT WORKERS TOOLS

DOUBLE END CONCAVE BEADING TOOLS



				Iron	, Nickel	Plate	d		
	Two	Sizes	in	One	. Makes	Half	Round	Beads.	
Nos.					47A	47B	47C	47D	47E
Size,	Inches	8			18 X //	16X 14	14 X 76	75 X 3/8	% x 1/2
Each					\$1.20	1.20	1.20	1.20	1.20
				. 0	the ten or	Dow			

#### DOUBLE END CONVEX BEADING TOOLS



					h	o	n, Nick	el Plat	ed		
	Two	Sizes	in	0	ne	٥,	Makes	Half I	Round	Depression	on.
Nos.							48A	48B	480	48D	48E
Size,	Incl	hes					18 X 16	7 X 1/4	1/4 X	1 10 X 3/8	% x 1/2
Each	1						\$1.20	1.20	0 1.2	0 1.20	1.20
						1	Six in a	Box.			

#### MASONS JOINTERS



For Masons, Brick and Cement Work
Forged Steel, Black Finish, Polished Ends. Each
No. 200—% in. Thick One End; Other End % in.
Thick, Grooved Ends, Weight Each ½ Lb.....\$0.60
Twelve in a Box.

#### MASONS HANDLED JOINTERS



# SOLID IMPRINT ROLLER

Iron, Nickel Plated, Iron Handle



Nos	60A	60B	60C
Length, In	4	6	8
Diam., Inches	3 1/2	3 1/2	3 1/2
Wt .Each, Lbs.	10	12	15
Each	\$8.00	10.00	12.00

# TAMPERS

# CAST IRON

With Gas Pipe Handle

Cast in One Solid Piece, Japanned, for general use in tamping dirt, cinders, etc. Particularly adapted for cement workers use.

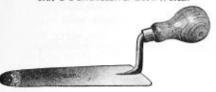
Particular attention is called to the advantage of the gas pipe handles over the old style wood handles as they eliminate breakage and are much more convenient to use

Size	2	8	4
Diam. Face, Inches.	5	6	6
Weight Each, Lbs	19	9.4	3.4

		4.10	No. 93A.
No. 92A.	93A-Square		Teo. Politi
Size	 	5	6
Face, Inches	 	6x6	8x8
Weight Each, Lbs	 	16	21

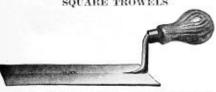
1.40

#### No. 1 FINISHING TROWELS



Inches. 6x134	6X132 .90	. 95
Inches		6 35 x 1 3, 1 . 05
 Inches	7x136 \$1.05	7x1 % 1.15

## SQUARE TROWELS



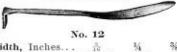
Inches.	6x1 ½ - 90	6 ½ x1 ½ .95
Inches.	7x1 ½ \$1.05	6x2 1.10
Inches.	6 ½ x2 \$1.15	$7x2 \\ 1.25$

#### GATE CUTTERS AND SPOONS



Width, Inches... 1 Each ...... \$0.60 .70

# BENCH LIFTERS



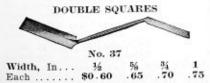
Width, Inches	.45	% . 55
Width, Inches	% , <b>65</b>	¾ .70
		-

N	o. 13		
Width, Inches		% .55	110 .60

# BENT BENCH LIFTERS



Width,	In	36	36	56	34
Each		\$0.55	. 60	. 65	.70



# MOULDERS TOOLS

# TAPER AND SQUARE SPOONS



Width, Inches	1	134	134
Each	\$0.65	.75	.85

#### SLICK AND OVAL SPOON



Width,	In	34	1	114	135 6
Each		80.60	. 65	.75	.85

#### HEART AND SQUARE SPOONS



Width,	In	1	134	1 36	134
Each		\$0.60	.70	.80	. 90

#### HEART AND OVAL SPOONS



Width, In ... Width, In... 1 1½ Each . . . . . . \$0.60 . . 70

#### LIFTERS

# No. 42

## Prices Each

Length, In	10	12	14
3/8 in. Wide	\$0.60	. 65	. 70
16 in. Wide		. 70	. 75
% in. Wide		. 75	. 80
¾ in. Wide		.80	. 85
Length, In	16	18	20
% in. Wide	80.75	.80	.85
1/2 in. Wide	. 80	.85	. 90
% in. Wide	. 85	.90	. 95
¾ in. Wide	. 90	. 95	1.00

NOTE-We shall be pleased to furnish Any Other Tools not shown in this Catalog.

#### BOX LIFTERS

j			
ĺ	No. 48		
	Length, Inches Width, Inches Each	5%	16 % 1.25
	Length, Inches Width, Inches Each		$\frac{18}{\%}$ 1.35

#### FLAT AND CIRCULAR FLANGES

#### No. 50 Width, Inches..... 1.10 Width, Inches....

#### PIPE SLICKS

Each ..... \$1.20



	.\	0, 52		
Width,	Inches	1	1 32	2
Each		80.60	. 60	. 60

#### BUTTON SLICKS



	N	0. 54		
Width,	Inches	1 1/2	2	236
Each		80.60	. 60	. 60

#### SQUARE CORNERS



Width,	Inches	1 3/2	2	2 1/2
Each		\$0.65	.70	. 75

## INSIDE SQUARE CORNERS



							7	Š.	١.	4	56	;	
Width,	I	n	c	h	e	s.						2	212
Each .				2								\$0.85	. 90

#### HALF ROUND CORNERS



	2	V	0.	57		
Width, Each					1	$\frac{134}{.65}$
Width, Each						.75

# FOUNDRY RIDDLES



#### Extra Heavy, 18 in. Diameter

Heavy Wood Rims, Extra Heavy Wire Reinforced with Heavy Cross Bars.

Extra care is taken in the manufacture of these Riddles and they will out wear any other make.

No. 20-Steel Wire

Mesh, Per In						
Per Dozen	\$16.00	16.00	16.00	16.00	16.00	16.00
Mesh, Per Inch.						
Per Dozen		\$16.00	16.00	16.00	16.00	16.00

	No.	30-	-Gal	lvanized	Steel Wir	e
Mesh, Per						
Per Dozen						\$18.00

No. 40—Brass Wire

 Mesh, Per In...
 2
 3
 4
 5
 6
 8

 Per Dozen....
 \$26.00
 26.00
 26.00
 26.00
 26.00
 26.00
 26.00
 26.00

 Mesh, Per Inch.....
 10
 12
 14
 16
 18

 Per Dozen.....
 \$26.00
 26.00
 26.00
 26.00
 26.00
 26.00

Weight Per Dozen, 50 Pounds. One-half Dozen in a Crate.

# SAND SCREENS

Solid Pine Frame, Extra Heavy Steel Wire

These Sand Screens have an established reputation for reliability and long wear.

They are made of the best material by experienced workmen and are made to stand hard usage.

The Improved Process of lacing or wrapping these screens make them the strongest and most durable on the market.





No. 100-Leather Covered

Seasoned Straight Grain Lumber, Steel Hinge, Heavy Galvanized Iron Nozzle, Length, Inches. 8 9 10 12 14 16

Wt. Doz., Lbs. 20 25 40 50 60 70 Per Dozen... **\$24.00 27.00 30.00 39.00 48.00 54.00** 





#### No. 104-Leather Covered

Seasoned Straight	Grained	Lumber,	Long	Pointed	Nozzle.
Length, Inches					7
Weight Per Dozer					18
Per Dozen					\$21.00

#### MORTAR HODS

# TIRON CLAD"

## NEVER DRIP

Sheet Steel

Made with a heavy Rolled Wire Edge for reinforcement, Pressed Steel Socket Fork, Wooden Shoulder Saddle and Handle.

Each

These Hods overcome the disagreeable faults of other hods by eliminating the dripping of the contents down back of the carrier.

# BRICK HODS

#### STANDARD

Sheet Steel

Strongly Reinforced on all Edges, Wooden Shoulder Saddle, Pressed Steel Socket Fork, perfect in all respects. Wooden Handle.



# BRICK CLAMPS



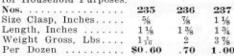
Malleable Iron, nicely finished. Handles Bricks without injury to the bricks or the workman's hand. Picks up and discharges instantly. Lever Grip is sure. Made to stand rough usage. Each

# TOOL CLASPS

FORG

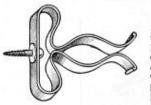
Spring Brass

For holding Tools and other articles for Store Display Cases, for Tool Cabinets and for Household Purposes.



Nos. 235 and 236, One Gross; No. 237, One-half Gross in a Box,

#### THREE IN ONE



#### Spring Steel

Made with Gimlet Pointed Square-shouldered Screw that will not loosen. The loops form a handle like a Gimlet, so that holder is easily screwed into place. The main Clasp holds regular size articles, the two loops are for holding small items. Per Dozen

## TOOL BAGS

#### MASONS



#### No. 225-All Canvas

Heavy One Piece
White Duck, Double
Thick Bottom with
Heavy Straw Board
Filling, Lock Stitched
Double, 12 Gauge Steel
Frame, Riveted Steel
Bottom, Studs Complete with Lock and
Key, Leather Handles.

Length, Inches	16	18	20	22	24
Height, Inches	13	15 1/2	15 1/2	15 1/2	15 1/2
Width Bottom, Inches.	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2
Weight Each, Lbs	3	3	3 1/2	4	4 1/4
Each	\$4.00	4.25	4.50	4.75	5.00

#### BRICKLAYERS AND MASONS

#### No. 240—Leather Trimmed

Heavy One Piece Brown Duck, Chrome Leather Trim, 3½ in. Leather One-Piece Sides and Bottom, Leather Welt, Steel Studs, Lock-Stitch Sewing, Riveted Frame of Steel, Harness Leather Handles and Straps passing around Bag.



Length, Inches		 		 		 18	20
Height, Inches		 	 	 		 15 1/2	15 1/6
Width Bottom,							5 1/2
Weight Each,	Lbs	 	 	 		 4 1/4	4 1/6
Each		 		 	 ,	 \$9.00	9.50

#### LINEMENS



#### No. 250—Leather Bottom

Heavy One Piece White Duck, Trimmed for 3½ in from Bottom with Heavy Bag Leather, Double 12 Gauge Steel Frame, Steel Bottom Studs, Two Fastening Straps with Buckles, Leather Handles,

-																	
Length, Inches								-	ç		4					18	20
Height, Inches				,	,	,	,	,				,			,	15 1/2	15 1/2
Width, Inches				4	ò	è							,	,		5 1/2	5 1/2
Weight Each,	L	bs														5	5 1/2
Each																\$7.50	8.00

Leather on sides and bottom of one piece. This arrangement avoids any possibility of sewing ripping or rotting and also practically makes the bottom and sides waterproof. More than doubles the life of the bag. All sewing is lock stitch.

# TOOL BAGS

#### ELECTRICIANS



No. 345—Genuine Cowhide Leather

Two Leather Shoulder Straps, Pad and Handle and Saw or Bit Holder Straps, Bottom is Threeply and equipped with Steel Studs.

Retaining Straps pass clear around the Bag. Black Finish.

Length,	Inche	s			÷			.1	Ç.	÷			18	20	22
Height,	Inches												7	7	7
Width,														8	8
Weight,	Lbs												5 1/2	6	6 16
Each														9.20	9.60

This Tool Bag while being particularly adapted for electricians use will also be found practical for plumbers, wiremen, gas fitters, piano tuners or almost any other class of mechanics.

The shoulder straps can be detached if desired and the bag used as a hand satchel.

#### PLUMBERS

#### Carpet

#### Leather Trimmed

The Latest Improved Style of Tool Kit for Plumbers use.



Each

# CARPENTERS APRONS



## Heavy Grade Duck

With Hammer Strap and Four Pockets Securely Riveted, Leather Corner Reinforcements; Extra Well Stitched, Substantial, Well Made and Attractive.

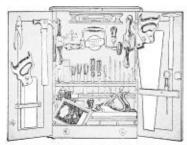
They are very Durable, Give Perfect Fit and Comfort to the User.

One Dozen in a Bundle.

Per Dozen 3 Lbs...... 7.50

# TOOL CABINETS

STANLEY



Equipped with Stanley High Grade Tools

Each

No. 851-Contains 35 Stanley Tools, Put Up in Rich Dark Stained Oak Cabinet 26 1/2 in. High, 191/2 in. Wide, and 8 in. Deep, with Paneled Doors Hung on Brass Hinges and with Brass Lock, Drawer in Base for Holding Small Tools, Nails, etc., Weight 52 Lbs.......\$65.00

#### Contents of No. 851 Cabinet

- Hammer, 13 oz., No. 15, Hammer, 4 oz., No. 147, Saw (Hand), 29 in. Saw (Back), 19 in., No. 4, Saw (Keyhole), No. 1. Saw (Coping), with 12 Blades.
- Screw Driver, 5 in., No. 20. Screw Driver, 4 in., No. 40. Screw Driver, 3 in., No. 50. Rule (Zig Zag), 5 ft. No. 105.
- 1 Plane (Bench), 111/2 in., No.

- Plane (Block), 6 in., No. 60.
  5 ½.
  Plane (Block), 6 in., No. 60.
  Scraper, No. 80.
  Bit Brace, 8 in., No. 915.
  Auger Bit, ½ in.
  Auger Bit, ½ in.
  Gimlet Bit, No. 6.
  Screw Driver Bit, ¼ in.
  No. 26.
- I Bit Gauge, No. 49.
  1 Chisel, ½ in., No. 40.
  1 Chisel, ½ in., No. 40.
  1 Chisel, ½ in., No. 40.
  1 Chisel, 1 in., No. 40.
  1 Cold Chisel, ½x6 in., No. 1A.
  1 Vise, 1½ in. Jaws, No. 741.
  1 Gauge (Marking and Mortise), No. 98.

- tisel, No 98.

  Combination Square, 9 in., No. 21.

  Bevel 8 in., No. 25.

  Spoke Shave, No 151.

  Plumb and Level, 12 in., No. 36G.

  Nail Set. 2/32 in., No. 11.

  Hollow Handle Tool Set., No. 365. Contains One Each, Chisel, Reamer, Scratch Awl, Screw Driver, Tack Puller, Belt Awl and Six Brad Awls Assorted.

  Pair Pliers No. 66.

  1 Oil Stone No. 29.

#### 1 Package Corrugated Fasteners.



Equipped with Stanley High Grade Tools Each

No. 862-Contains 20 Stanley Tools, Put Up in 14 in. Wide, 6 14 in. Deep, 22 in. Long Oak Cabinet. Finished in a Dark Stain and Varnished, Sides Set in, Joints Nailed and Glued, 3 Hinges, Lock and Carrying Handle, Weight Each 22 Lbs....\$35.00

#### Contents of No. 862 Cabinet

- Hammer, 13 oz., No. 12.
  Screw Driver, 5 in., No. 20.
  Screw Driver, 3 in., No. 50.
  Screw Driver, 3 in., No. 50.
  Rule (Zig Zag), 4 ft., No. 04.
  Saw (Hand), 18 in.
  Plane (Bench), 8 in., No. 3.
  Chisel, ½ in., No. 40.
  Spoke Shave, No. 151.
  Bit Brace, 8 in., No. 945.
  Auger Bit, ½ in.
  Auger Bit, ½ in.
  Auger Bit, ½ in.
  Gimlet Bit, No. 6.

- 1 Screw Driver Bit, & In., No. 26.
  1 Pair Pliers.
  1 Hollow Handle Tool Set, No. 306, Contains One Each, Chisel, Reamer, Scratch Awl, Serew Driver, Tack Puller, Belt Awl and Six Brad Awls Assorted.
  1 Vise, No. 741.
  1 Combination Square, 9 in
- 1 Combination Square, 9 in.,
- 1 Nail Set, 2/32 in., No. 11.

# 1 Package Corrugated Fasteners.

# TOOL CABINETS



#### STANLEY

Equipped with Stanley High Grade Tools

Each No. 903-Contains 17 Stanley Tools, in Stained Oak Cabi-net 21 in. Long, 1114 in. Wide and 4 in. Deep, Tops and Bottom Set In. Joints Nailed and Glued, 3 Hinges, 2 Catches and Carrying Handle, Weight 16 Lbs. . . . . . . \$20.00

#### Contents of No. 903 Cabinet

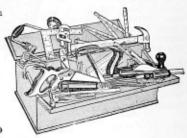
- 1 Hammer, 13 oz., No. 12.
  1 Screw Driver, 5 in. No. 20.
  1 Screw Univer, 3 in., No. 50.
  1 Rule (Zig Zag), 4 ft., No. 04.
  1 Saw (Hand), 16 in.
  1 Try and Mitre Square, 7½
  in., No. 2.
  1 Marking Gauge, No. 62.
  2 Plane (Block), 7 in., No. 220.
  3 Chisel, ½ in., No. 50.
- 1 Chisel, ¾ in., No. 50.
  1 Bit Brace, 8 in., No. 945.
  1 Auger Bit, ¾ in.
  1 Auger Bit, ¾ in.
  1 Gimlet Bit, No. 6.
  1 Screw Driver Bit, ¼ in., No. 26.
  1 Awl, No. 1.
  1 Vise, No. 741.
- 1 Package Corrugated Fasteners.

# TOOL CHESTS

STANLEY

Equipped with Stanley High Grade Tools

Each No. 888B — Contains 18 Stanley Tools in Stained Oak Chest. 20 in. Long, 10 1/2 in. Wide, 8 in. Deep with Hinged Cover and Brass Carrying Handle. A Sliding Drawer Inside for Small Tools, Nails, Etc., Weight 19 Lbs. . . . . . . . . . . \$15.00



#### Contents of No. 888B Chest

- 1 Hammer, 12 ox., No. 12.
  1 Saw Panel, 16 in.,
  1 Saw (Coping) with 12 Extra Blades, No. 100.
  1 Screw Driver, 4 in., No. 20.
  1 Rule (Zig Zag), 4 ft., No. 04.
  1 Flane (Bench), 8 in., No. 945.
  1 Bit Brace, 8 in., No. 945.
  1 Auger Bit, \$\frac{1}{2}\$ in.
  1 Auger Bit, \$\frac{1}{2}\$ in.
  1 Gimlet Bit, No. 6.
  1 Chisel, \$\frac{1}{2}\$ in., No. 40.
  1 Cold Chisel, \$\frac{1}{2}\$ x6 in., No. 1A.

- 1 Carpenters Steel Square, 12 in., No. 10. 1 Hollow Handle Tool Set, No. 302, Contains One Each Gimlet, File, Saw, Chisel, Reamer, Screw Driver, 2 Brad Awls and with Ex-tra 61½ in. Saw, 1 Adjustable Pipe Wrench, 19 in.
- 10 in. 1 Pair Pliers. 1 Glass Cutter, No. 300. 1 Sharpening Stone.
- 1 Package Corrugated Fasteners.

# STANLEY TOOL ASSORTMENTS

Make Your Own Tool Chest



No. 907-Assortment, 7 Tools in Card-board Box, 1 Each 10 oz. Nail Ham-mer, 2 ft. Rule, 4 in. Screw Driver, 14 in. Hand Saw, 8 in. Bit Brace, % in. Auger Bit and Marking Gauge, Weight 4 Lbs., \$5.00

# MACHINISTS TOOL CHESTS

UNION



#### Plain Oak, Five Drawers

Lock-Cornered Joints, 3-Ply Veneer Bottom, Leather Handle, Nickel Plated Steel Corners, Flush Ring Pulls, Solid Brass Lock with 2 Keys, Has Two Rows of Pulls Instead of One as Illustrated.

Drawers are not lined.

Each

No. XG20—5 Drawers, 18 4 x6x2 5, 15, 14, 7, and 3, in., Outside Dimensions 20 in. Long x 7 4, in. Wide x 10 4, in. High, Weight Each 17 Lbs., \$12.00

# Quartered Oak, Six Drawers

Lock-Cornered Joints, 3-Ply Veneer Bottom, Leather Handle, Nickel Plated Stee! Corners, Flush Ring Pulls, Solid Brass Lock with 2 Keys, Dark Oak Finish, Waterproof, Varnished with Dull Rub Finish. Drawers Felt Lined.



Each



#### Quartered Oak, Eight Drawers

Lock-Cornered Joints, 3-Ply Veneer Bottom, Leather Handle, Nickel Plated Steel Corners, Flush Ring Pulls, Solid Brass Lock with 2 Flat Keys, Dark Oak Finished, Waterproof, Varnished with Dull Rubbed Finish, all Drawers are Green Felt Lined.

Eac

No. F-20—4 Short Drawers 8½x7x½ in., 1 Short Drawer 8½x7x2½ in., 3 Long Drawers 18½x7 in. x 1½, 1½ and 2½ in., Outside Dimensions 20 in. Long. 8¾ in. Wide, 12 in. Deep, Weight Each 21 Lbs.

Till Top Cover with Mirror

#### Quartered Oak, Seven Drawers

Lock-Cornered Joints, 3-Ply Veneer Bottom, Leather Handle, Nickel Plated Trimmings, Brass Lock with 2 Flat Steel Keys, Flush Ring Pulls, Waterproof Varnish, Dark Oak Rubbed Finish Paneled Back and Front, All Drawers and the Till Cover are Green Felt Lined.



No. B-20—4 Short Drawers 8 \% x6x \% in., 1 Short Drawer 8 \% x6x2 \% in., 2 Long Drawers 18 \% in. x \% and 2 \% in., 7ill and Cover 19x6 \% x3 in., Outside Dimensions 20 in. Long, 7 \% in. Wide, 12 \% in. High, Weight Each 20 \% Lbs.. \$18.80

# MACHINISTS TOOL CHESTS

UNION



Till Top Cover with Mirror, Leatherette Covered, Seven Drawers

Solid Mahogany Drawer and Till Fronts, Bottom and Sides of Tills are Lined with Green Felt, Three-Ply Veneer Bottom, Leather Handles, Nickel Plated Trimmings, Brass Lock with 2 Flat Steel Keys, Flush Ring Pulls.

Each

No. A-20—4 Short Drawers 8 ½ x6x % in., 1 Short Drawer 8 ½ x6x2 ½ in., 2 Long Drawers 18 ½ x6 in. x ½ and 2 ½ in., Till and Cover 16x6x3 in., Outside Dimensions 20 in. Long, 7 ¾ in. Wide, 12 ¾ in. High, Weight Each 18 Lbs....\$20.80

#### UNION GARAGE

#### For Garage Use—Oak Oilproof Black Finish

Two Small Top Drawers are fitted with movable partitions for small parts and for delicate instruments such as battery gauges, etc. The Third Drawer from the top is designed to hold a complete set of socket wrenches.



The bottom compartment is a tray made of solid oak throughout, fitted with a handle which drops down into the drawer when not in use.



Each

#### KENNEDY ALL STEEL



Will Not Swell, Warp or Crack

Reinforced at all points of straining. The drawers run on tracks which cannot let them drop out of place regardless of the weight of their contents.

Extra till under lid and all drawers felt lined.

Each

No. 519—Inside Dimensions, Till Under Lid 18 % x 7 % x3 % in., Long Deep Drawer 18 % x7 ½ x2 ¼ in., Long Shallow Drawer 18 ½ x7 ½ x1 ¼ in. Short Deep Drawer 8 % x7 ½ x1 ¾ in., Short Shallow Drawer 8 % x7 ½ x3 ¾ in., 19 in. Long x 8 in. Wide x 12 ½ in. High, Weight Each 19 ½ Lbs. 17.50

#### TOOL BOXES KENNEDY MECHANICS KITS

#### Complete with Tray

Sheet Steel, Baked Brown Enameled Finish, Brass Catches and Corners, Fitted with Strong Two Tumbler Lock, Leather Covered Steel Handle, Double Seamed, Electric Welded and Reinforced Throughout.



Nos	114	116	118	120	122
Length, Inches	14	16	18	20	22
Width, Inches	7	9	10	11	11
Height, Inches	9	11	13	13	13
Weight Each, Lbs	6	8	10	111/2	12 14
Each	\$5.25	5.50	5.75	6.00	6.25

#### KENNEDY GARAGE KITS



#### For Shop or Outside Work

Sheet Steel, Brown Enameled Finish, Brass Catches and Corners, Two Tumbler Lock, Leather Covered Steel Handle, Equipped with Two Trays, the upper tray may be removed from the case and used about the shop with just the tools necessary for the job.

No. 716-16 in. Long, 7 in. Wide, 9 in. High, Weight Each 8% Lbs.....

# CARPENTERS TOOL CASES



Zinc Covered

Lock Cornered Wool Boxes, Lacquered Zinc Covered and Bound with Black Enameled Steel Angle, Brass Plated Lock with 2 Keys Brass Plated Corner Catches and Clamps Leather Covered Handle, has Place for Three Saws, Level Brackets and Place for Framing Square, the Tray pulls out and is always level.

No. Z732-32 in. Long, 7 in. Wide, 161/4 in. High, 



#### With Built-In Tray

This Case is of the same general construction as the No. 732, except that the top opens and the shelf under tray may be used for small Planes, Gauges, Oil Stones, etc. It is equipped with Saw and Level Racks and place for holding Framing Square.

## CARPENTERS SHOULDER BOXES UNION

#### Zinc Covered

Saw Block in top will carry three Saws, Lock Cornered, Brass Plated Lock with 2 Keys.

Each No. Z132-30 in. Long, 8 1/2 in Wide, 8 in. High, Weight Each 14 1/2 Lbs...... \$7.50



#### CARPENTERS TOOL CASES WIZARD

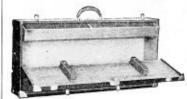


#### Metal Covered

Olive Green Enameled Metal Covering, Equipped with 31 in. Drawer for Small Tools, Brackets for 30 in. Level, Space for Planes, etc.; high enough to accommodate a regular Standard Square.

## Blocks in Drop Front for Three 26 in. Saws

Each No. GL732-32 in. Long, 7 in. Wide, 16 in. High, 



#### Three-Ply Wood, Golden Oak Finish

Equipped with 31 in. Drawers for Small Tools. Brackets for 30 in. Levels, Space for Planes, etc., high enough to accommodate a regular Standard Square.

#### Blocks in Drop Front for Three 26 in. Saws

Each No. GI632-32 in. Long, 7 in. Wide, 16 in. High, Weight Each 19 Lbs.....

# GENERAL PURPOSE TOOL CASES UNION

#### With Automatic Tray

Lock-Cornered Wood Frame, Zinc Covered, Corner Bindings Made of Steel Rust-Proof Black Enamel Finish, Brass Plated Lock, Clasps, Corners and Hinges Se-curely Riveted. Lock has Two Flat Steel Keys, Leather Covered Steel Handle with Brass Plated Steel Loops.

The Tray Automatically Raises with the Top and always remains level and out of the way.



Nos	Z216	Z219	Z222	Z225
Length, Inches		19	22	25
Weight Each, Lbs		9	10	11
Each	\$5.80	6.10	6.50	7.10

#### WIZARD



#### For Auto Mechanics, Electricians and General Use

Well Constructed Wood Frame is Covered with Olive Green Enameled Metal, Galvanized Iron Angles protect all Edges and the Corners, Locks and Strong Clamps are Heavily Brass Plated. The Indestructible

Steel Handle and All Other Hardware is properly attached with Clinched Rivets instead of Clinched Nails.

#### Fitted with Strong Metal Tray

Each No. GL219-19 in. Long, 8 in. Wide, 8 in. High, Weight Each 7 Lbs......\$4.55

# RAYBESTOS BRAKE LINING



SURFACE TREATMENT



PARTIAL IMPREGNATION

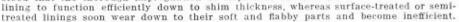


RAYBESTOS-TREATED CLEAR THROUGH

The Raybestos Company is the only firm engaged in the manufacture of both brakes and brake lining, and the advantage gained from being able to study brake mechanisms and brake problems at close range, has resulted in the manufacture of a lining best adapted to meet actual brake service conditions.

Material and Construction: Raybestos is a sold, woven asbestos fabric, made of 90% to 95% long-fiber asbestos, and interwoven with brass wires. It contains no layers or piles or rubber compound that might loosen under extreme heat, oil or weather conditions.

Impregnation and Heat-Treatment: Raybestos is impregnated with a special heat and wear resisting compound that gives it a wearing life found in no other brake lining. The treatment given Raybestos is so thorough that there isn't a fiber in its construction that isn't saturated with this special compound before it enters the ovens where it is literally baked at a degree of heat unattainable in normal brake service. It can readily be understood that the thorough impregnation of Raybestos enables the



Adaptability: Raybestos can be used wherever a high-grade friction is required. It is not only adaptable as a Brake Lining and Clutch Facing on automobiles and trucks, but can be used also for the same purpose on mill transmission equipment, hoisting machines, elevators, mining machinery, etc.

Note: The genuine has silver edges, and the name Raybestos stamped on every foot, As there are many imitations, it is important that you always look for these distinguishing marks.

#### PRICES PER LINEAL FOOT

Sizes Set off by Heavy Rule are Standard Sizes-Balance are Industrial Sizes.

Width		Thickness, Inches.												
Inches	1/8	3/2	ารัส	3 <sup>7</sup> 2	1/4	1 <sub>2</sub> e	36	1/2	5%	34	1			
1	\$0.40	\$0.45	\$0.50	\$0.60	\$0.70	\$0.83	\$0.96							
134	.45	.50	.55	.65	. 75	.92	1.06							
134	.50	.55	.60	.70	.80	.98	1.16							
			.70	.80	.90	1.13	1.35							
1 1/2	.60	.65		.90	1.00	1.27	1.54							
1%	.70	. 75	.80		1.20	1.47	1.73			*******				
2	.80	. 85	.90	1.05					The state of the s					
214	.90	.95	1.00	1.15	1.30	1.62	1.93							
21/2	1.00	1.05	1.10	1.30	1.50	1.81	2.12							
234	1.10	1.15	1.20	1.40	1.60	1.96	2.31	*******						
3	1.20	1.25	1.30	1.50	1.70	2.10	2.50	\$3.60						
3 34	1.25	1.33	1.40	1.60	1.80	2.25	2.69	3.87			1			
8 1/2	1.30	1.40	1.50	1.70	1.90	2.39	2.88	4.16						
3 34	1.35	1.48	1.60	1.83	2.05	2.57	3.08	4.44						
4	1.40	1.55	1.70	1.95	2.20	2.74	3.27	4.72						
434	1.50	1.65	1.80	2.08	2.35	2.91	3.46	5.00						
4 16	1.60	1.75	1.90	2.20	2.50	3.08	3.65	5.28						
4 34	1.70	1.85	2.00	2.30	2.60	3.23	3.85	5.57						
5	1.98	2.15	2.31	2.64	2.97	3.71	4.44	5.85	\$7.26					
536	2.20	2.37	2.53	2.93	3.31	4.09	4.86	6.41	7.96					
6	2.42	2.59	2.75	3.18	3.60	4.44	5.28	6.97	8.67					
61/2	2.99	3.33	3.67	4.00	4.33	5.03	5.71	7.54	9.37	\$11.20	\$14.8			
7	3.15	3.50	3.84	4.24	4.62	5.38	6.13	8.10	10.08	12.05	15.9			
7 1/2	3.39	3.78	4.18	4.58	4.97	5.76	6.56	8.67	10.78	12.89	17.1			
8	3.54	3.95	4.36	4.82	5.28	6.13	6.97	9.23	11.48	13.73	18.2			
814	3.78	4.18	4.65	5.13	5.60	6.50	7.39	9.79	12.19	14.58	19.8			
9	3.94	4.40	4.87	5.40	5.92	6.88	7.82	10.35	12.89	15.42	20.4			
9 16	4.18	4.69	5.19	5.72	6.24	7.24	8.24	10.91	13.60	16.27	21.0			
10	4.33	4.86	5.39	5.97	6.56	7.61	8.67	11.48	14.30	17.12	22.			
10 36					6.86	7.98	9.09	12.05	15.00	17.95	23.5			
11					7.18	8.35	9.50	12.61	15.71	18.80	24.5			
111/6					7.50	8.72	9.93	13.17	16.41	19.65	26.1			
12					7.82	9.09	10.35	13.73	17.12	20.49	27.2			
1216					8.14	9.46	10.78	14.30	17.82	21.34	28.3			
18					8.45	9.82	11.20	14.85	18.52	22.18	29.5			
1314					8.77	10.20	11.62	15.40	19.23	23.02	30.6			
14					9.09	10.57	12.05	15.98	19.93	23.87	31.			
15					9.72	11.31	12.89	17.12	21.34	25.56	34.0			
16					10.35	12.05	13.73	18.24	22.75	27.25	36.5			
17					10.99	12.78	14.58	19.36	24.16	28.94	38.5			
18					11.62	13.52	15.42	20.49	25.56	30.62	40.7			
19					12.25	14.27	16.27	21.62	26.97	32.32	43.0			
20					12.89	15.00	17.12	22.75	28.38	34.00	45.2			



# JACKS

#### REES AUTOMOBILE



No. 0

Operated by a long folding handle connected to the jack with a Universal Joint, permitting it to be easily operated without crawling under the car. Equipped with Double Worm Gear Drive.

No. 0 - Capacity 1 Ton, Height 9% in., with Cap Raised 11 in., Total Lift 6 in., Weight Each 9½ Lbs., Complete with Ex-

No. 1C



Each No. 1C-Capacity 2 Tons. Height 10 in., with Cap Raised 11¼ in., Lift 6 in., Weight Each 13 Lbs., Complete with Extension Handle ......88.50

Also equipped with the long folding handle. Will cover the requirements of a passenger car. Provided with double worm gear

#### REES TRUCK





No. 2A-Capacity 4 Tons, Height 11% in., Lift 6 in., Weight Each 22 Lbs., Complete with 



No. 3A

With Foot Lift and Double Worm Gear Drive

No. 3A—Capacity 6 Tons, Height 12 1/4 in., Lift 6 in., Weight 27 Lbs., Complete with Lever 



#### REES GENERAL PURPOSE

#### No. 21A



No. 2A.

An Extra Heavy Duty Jack for heavy truck service or general heavy duty use. Equipped with Foot Lift and Double Worm Gear Drive. Each

No. 21A - Capacity 10 Tons, Height 14% in., Lift 9 in., Weight Each 46 Lbs., Complete with Lever Bar Han-

The most important feature of the Recs Line is the patented Double Worm Gear Drive. This relieves all thrust

or side load from the working parts and produces a perfectly balanced mechanism free from unnecessary friction and thrust.

# JACKS

#### DUFF AUTOMOBILE



Meet all requirements as to lifting capacity and different axle heights of the majority of the passenger cars. Light and sturdy and afford absolute safety from danger of collapse or tip.

Capacity 1 Ton, 4x6 in. Base Each No. 08-Height 11 % in., Raise 6 % in., Foot Adjustment from 41/2

Foot Adjustment from 41/2 to 9% in., Weight Each 10 Lbs.,

No. 08. with Handle . . . . . . . . . . . . . 5.00

#### DUFF TRUCK



Present great strength and durability, powerfully compounded geared leverage and a Rack of high Carbon Steel, machine cut and heat treated.

No. 100-Capacity 3 Tons, Height 11 in., Raise 6 in., Weight 17 Lbs. ......\$10.00

No. 200-Capacity 5 Tons, Height 13 in., Raise 6 % in., Weight 

Complete with Lever Handle.

# DUFF BARRETT TRIP OR TRACK

# Single Acting



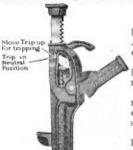
Of the suspended pawl type, which eliminates the use of a separate tripping device, the end of the lower or short pawl serving as such. The suspended pawl design successfully overcomes the tendency, observed in other jacks of this type, of the pawl jumping out of its bearings. The base and socket lever are so reinforced at points of greatest strain, as to make the jack practically unbreakable. It is single-acting, i. e., load raised on down stroke only.

Trip jacks are intended for track work only, as they cannot be lowered gradually except by "fingering down."

No. 117—Capacity 15 Tons, Height 22 in., Raise 13 in., Weight Each 60 Lbs..................\$22.00 List price shown covers round socket lever with wood

Deduct \$1.00 from list price if square socket lever, for use with lining bar, is desired.

#### Double Acting



Recognized standard by the leading railroads of the world. Also used extensively by contractors where a trip is required.

Straight Trip Jacks cannot be lowered gradually like an automatic lowering jack.

The double-acting feature permits raising the load one notch on both upward and downward stroke.

List price covers round socket lever with wooden handle. Deduct \$1.00 from list if square socket lever, for use with lining bar is desired.

Each No. 1A-Capacity 15 Tons, Height 22 in., Raise 13 in., Weight 58 Lbs......\$22.00

# JACKS

#### DUFF BARRETT AUTOMATIC LOWERING



#### Single-Acting

Load is raised or lowered by operation of handle on down-stroke only. More efficient in operation than the double-acting type and of greatly improved design.

Widely used by industrial concerns, public utility corporations, mines, contractors, truck men, etc.

Unexcelled in safety, low repair cost and easy and convenient operation.

Nos. 550 and 551 are furnished with round socket lever and 3 ft, steel operating bar.

Nos. 518 and 519 are furnished with round socket lever and wood handle.

Nos.	Capacity, Tons	Height, In.	Raise, In.	Weight, Lbs.	Each
550	5	16	8	32	\$16.00
551	5	21	13	40	18.00
518	10	22	12	7.0	25.00
519	15	28	17	96	40.00

#### Double-Acting



Raise the load one notch on both upward and downward stroke of lever. An eccentric at the side controls the reversing mechanism. A half turn of this eccentric changes the direction of the jack.

Used for rapid handling of mining machinery, mining cars, agricultural machinery, and general allround service.

Furnished with round socket and wood handle.

Nos.	Capacity, Tons	Height, In.	Raise, In.	Weight, Lbs.	Each
2	10	21	10	70	\$25.00
4	15	22	10	106	35.00
50	5	16	8	3.5	16.00
51	5	21	13	42	18.00

#### DUFF STANDARD BALL BEARING SCREW



These Jacks are very useful for heavy work of any character, including bridge work, car repairing, and the handling of heavy structural material. Especially suitable for rough outdoor usage, all working parts being of sturdy design, packed in leakproof case. All of the sizes listed be-low have a foot lift for the convenient handling of low loads. The full rated capacity is lifted on the head, while the foot lift is rated at one-half the capacity. direction up or down is controlled by a spring-actuated steel pin, located on the socket lever. Each jack is designed with carrying handles, one on each side of the jack, and is furnished with a steel tube operating bar.

Nos.	Capacity, Tons	Height, In.	Raise, In.	Weight, Lbs.	Each
60	15	26	13	132	\$70.00
67	2.5	22	10	170	90.00
61	2.5	27	13	200	96.00
68	35	22	10	220	130.00
62	3.5	26	13	250	138.00
64	5.0	27	13	320	150.00

#### JACKS

#### PEDERSEN OILJAK



Whether designed to lift ten tons or one, the Pedersen "Oiljak" requires less ellort to raise its load than any jack known before.

It will lower its load more easily and safely and control it on the way up or down with absolute certainty.

It will do its work in cramped quarters where no other jack could be used at all.

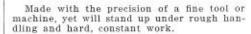
For example, the full rated load can be raised with one hand. Merely pumping the handle up and and down raises the load. No matter how little the han-

dle is moved, the ram responds at once and you hold every fraction of an inch you gain.

The ten-ton Pedersen "Oiljak" will safely raise and lower ten-ton loads hour after hour, day in and day out. It is a real utility tool made to stay in perfect working order for many years under hard service conditions. Other sizes can similarly be depended upon to do their work with utmost reliability.

Lowering the load is even easier. A twist of the wrist and down moves the load as far or as slowly as desired—without shock, jar or the least danger of the load getting away.

Literally, Finger Control stops the load instantly at any point on the way down.





Oil is Used as the Pressure Medium and construction eliminates objections inherent in all former designs.

# Some Special Features of the "Oiljak"

High carbon ground and polished steel ram carries the load. Adjustable oil retaining packing prevents leakage and keeps out foreign matter which might injure working parts of the jack.

Swivel head corrugated and hardened to insure firm grip under load.

Rigidly constructed rocker arm with a positive stoposcillating on a heat-treated fulcrum bolt, projects over pump stem.

Pump stem is provided with adjustable packing preventing leakage of packing.

#### Jack is Self-Lowering, Single-Action

Capacity, Tons	3	10
Height Lowered, Inches	9	11
Height Raised, Inches	14	17
Weight Each, Lbs	12	26
Each	\$16.50	35.00

Complete with 18 in. Operating Lever.

We Can Also Furnish Other Types of Special Heavy Duty Screw Jacks in High Speed and Special Pushing Styles. Send Us Your Inquiries.



# LOCOMOTIVE JACK SCREWS

Cast Iron Stand with Handle, Wrought Iron Screw, Cast Iron Head, Scored Top.

#### Capacity of Locomotive Jack Screws

Size,	Inches	1 34	1 1/2	1 %	2
Tons		10	12	16	20

Size Inches	Hgt. of Stand Inches	Height Over All Inches	Rise of Screw Inches	Approx. Weight Lbs.	Each
1 1/4 x 6	6	8 1/2	4 1/4	10	\$3.10
1 1/4 x 8	8	10 1/2	6 1/4	12	3.40
1 14 x 10	10	12 1/2	8 1/4	13 1/2	3.80
1 14 x 12	12	14 1/2	10 %	15	4.20
1 1/2 x 6	6	8 3/4	3 %	12	3.75
1 1/2 x 8	8	10 %	5 %	14	4.25
1 1/2 x 1 0	10	1234	7 %	17 1/2	4.75
1 1/2 x 1 2	12	1434	9 %	19	5.25
1 1/2 x 1 4	14	16 %	11 34	21	6.00
1 % x 6	6	9	3 1/2	14	4.50
1%x 8	8	11	5.1/2	19	5.00
1 % x10	10	13	7 1/2	20 1/2	5.75
1 % x12	12	15	9 1/2	25	6.25
1 % x14	14	17	111/2	29	6.75
1 % x16	16	19	13 1/2	32	7.50
2 x 6	6	9 1/2	3	19	5.25
2 x 8	8	111/2	5	221/2	6.00
2 x10	1.0	13 1/2	7	26	6.75
2 x12	12	15 1/2	9	30	7.50
2 x14	14	171/2	11	35	8.25
2 x16	16	191/2	13	37	9.25
2 x18	18	211/2	15	42	10.25
2 x20	2.0	23 1/2	17	46	11.50

# HOUSE RAISING SCREWS



For Pressing Cider, Wine, Tobacco, Lard, Cloth, etc. Also Used for House Raising. These Screws are made of refined Wrought Iron, with Cast Iron Nuts and Caps.

Size	Hgt. Over	Capacity	36 Tons	,	
Inches	All, Inches	Each	1 Size	Hgt. Over	
3x18	18	\$17.00	Inches	All, Inches	Each
3x20	2.0	17.60	3x36	36	\$24.00
3x24	24	19.20	3x38	38	24.80
$3 \times 26$	26	20.00	3x40	40	25.60
3x28	28	20.80	3x42	42	26.40
3x30	3.0	21.60	3x44	4.4	27.20
$3 \times 3 \cdot 2$	3.2	22.40	3x46	46	28.00
$3 \times 34$	34	23.20	3x48	4.8	28.80

# TRENCH BRACE FITTINGS DUFF ALL IRON, EXTENSIBLE



Ordinary Gas Pipe All That is Used for Barrel

Contractor need only cut own pipe to length required, and drill small hole at one end to insert a cotter pin, which holds brace together. (Price Pay Down)

nords brace rogerner. (	Price Per	r Dozen	()		
Diameter Screw, Inches	1 1/2	1 36	136	1 36	2
Length Screw, Inches.	12	14	16	18	18
Safe Ext. Screw, In	7	8	9	10	10
Weight Dozen, Lbs	185	192	204	208	440
Complete	\$20.00	21.00	22.00	23.00	45.00
Screw End Only	15.00	16.00	17.00	18.00	33 00

# TACKLE BLOCKS

REGULAR WOOD







Single. With Becket Without Becket

No. 26 No. 27 No. 21 No. 22

Triple. No. 28 No. 23

Plain Iron Bushed

Loose Side Hooks, with or without Beckets, Inside Iron Strapped, Varnished Hardwood Shell, for Manila Rope,

Size Sheave, Inches	For Dia. Rope, Inches	Length Shell, Inches	Single, Each	Double, Each	Triple,
1%x 1/2 x 3/4	3/8	3	80.70	\$1.30	81.75
214x %x%	1/2	4	.85	1.60	2.15
3 x 3/4 x 3/8	5%	5	.90	1.75	2.25
3 1/2 x1 x 1/2	34	6	1.10	2.00	2.90
4 1/4 x1 x 1/2	7/8	7	1.30	2.40	3.50
4 % x1 % x %	1	8	1.65	2.85	4.25
5 1/2 x 1 1/8 x 5/8	1	9	1.85	3.40	4.75
6 14 x 1 14 x %	1 1/8	10	2.75	4.50	6.25
8 x1%x%	11/4	12	4.45	7.50	10.65
9 1/2 x 1 1/8 x 1/8	1 3%	14	7.00	10.50	15.00

#### STANDARD STEEL







Single. No. 261

Double, No. 262

Triple. No. 263

### Plain Iron Bushed

Loose Side Hooks, with or without Beckets (Specify), for Manila Rope.

Size Sheave, Inches	For Dia. Rope, Inches	Length Shell, Inches	Single,	Double, Each	Triple, Each
2 1/4 x 5/8 x 5/8	1/2	4	\$0.85	81.60	\$2.15
3 x % x % 3 % x 1 x 1 %	5%	5	.90	1.75	2.25
4 14 x1 x 1/6	3/4 7/8	6	1.10	2.40	2.90
4 % x1 % x %	1	8	1.65	2.85	4.25
6 14 x 1 14 x 54	1 1/8	10	2.75	4.50	6.25

Lighter than Wood Blocks and equally strong. There is no danger of shell splitting and they are more durable. Nicely rounded edges protect rope.

# TACKLE BLOCKS

MALLEABLE







Heavy, With or Without Becket, Loose Hooks. Edges of Plates Rounded to Protect the Rope.

#### Plain Bushed, for Manila Rope

Dimensions.			Iron Bushed.			
Size. Shell Inches	Diam. Rope, Inches	Size Sheave, Inches	Single, Each	Double. Each	Triple.	
4	1/2	2 1/4 x 5/8 x 5/8	\$0.90	\$1.75	\$2.50	
5	5%	3 x 34 x 3/8	1.00	1.90	2.75	
6	34	3 1/2 x 1 x 1/4	1.25	2.25	3.25	
7	7/8	4 1/4 x1 x 1/2	1.50	2.70	4.00	
8	1	4 % x1 % x %	1.85	3.20	4.75	
10	1 14	6 1/4 x 1 1/2 x 3/4	3.10	5.10	7.00	
12	1 1/2	8 x1 % x 7%	5.00	8.25	11.75	
14	1 %	9 1/2 x 1 7/8 x 7/8	7.50	11.75	16.50	

# SNATCH BLOCKS

WOOD SHELL

No. 385-Drop Link, Iron Bushed



Drop Forged Flattened Swivel Hook and Head, Straps Extend to Bottom of Shell. Edges of Shell Rounded.

Size Sheave, Inches. . 3x1 1/8 4 1/2 x1 3/8 Hole in Sheave, In . . 34 For Rope Diam., In . . 11/4 Each ..... \$4.00 5.75 8.50 Length Shell, Inches . . . . . . 12 14 Size Sheave, Inches..... 6%x2% 8x2 1/4 Hole in Sheave, In ..... 7/8 No. 385. For Rope Diam., In...... 11/2 Each ..... \$10.00 13.00

# CLEVELAND MALLEABLE

Patent Automatic, for Manila Rope

Length Shell, Inches.

Simple in Construction and Very Efficient.

Committee of the Commit		10000	
Plain,	Iron Busi	hed	
Nos	200 7 3 ½ x1 ¼ % \$4.75		204 10 5 ½ x1 % 1 % 8.50
Nos. Length Shell, In Size Sheave, Inches. Diam. Rope, Inches Each	206 12 7x2 1% \$10.00	208 14 8x2 1/4 1 7/8 13.00	210 16 9x2 ½ 2 ¼ 17.00



5% x1%

# GALVANIZED IRON BLOCKS

SINGLE, WITH BECKETS



Galvanized Wrought Iron Hooks, Mallcable Iron Shells

No. 352-Plain Iron Bushed, Loose Hooks.

Size Nos.	1 1/2	5 1/2	7 1/2	9 14
Length Shell, Inches Diameter Rope, Inches	1 %	2	2 14	2 34
Diameter Sheave, Inches	34	1 3/8	3/8 1 1/2	1 34
Thickness Sheave, Inches	ria .	yσ	1/2	1/2
Each	\$0.19	. 25	.31	.43
Size Nos		111%	131/4	151/2
Length Shell, Inches		3	3 %	4 %
Diameter Rope, Inches	e contract	1/2 2	56	34
Diameter Sheave, Inches		2	2 1/2	3
Thickness Sheave, Inches		5/8	34	3/8
Each		\$0.48	. 75	1.10

#### DOUBLE, WITHOUT BECKETS



Galvanized Wrought Iron Hooks, Malleable Iron Shells

No. 351-Plain Iron Bushed, Loose Hooks.

Size Nos	2	4	6	8
Length Shell, Inches	1 %	1 34	2	2 34
Diameter Rope, Inches	70	14	200	3/8
Diameter Sheave, Inches	34	1	1 3/8	1 1/2
Thickness Sheave, Inches	าร์ส	11	3/8	1/2
Each	\$0.23	.27	.32	.38
Size Nos	10	12	14	16
Length Shell, Inches	3	3 14	4	5
Diameter Rope, Inches	70	1/2	5%	34
Diameter Sheave, Inches	1 %	2	2 3/2	3
Thickness Sheave, Inches	1,6	56	3/4	7/8
Each	\$0.50	.60	.95	1.35

# HOOKS AND THIMBLES



No. 227-Wrought Iron, Galvanized

Size, Inches	1/4	γle.	3%	10	1/2	5%	34	36
Length, Inches	2 7	2 %	2 %	3 16	3 1/2	5 14	5 %	6 1/2
Ins. Dia. Eye, In.		3/4	84	15	15	1 14	1 70	1 %
Est. Wt. 100, Lbs.							114	
Each	80.12	.13	.14	. 16	.17	.21	.29	.37

#### CHAIN HOISTS

#### YALE DIFFERENTIAL BLOCK

The Original Weston's Patent

In the Genuine Yale & Towne Blocks the name of the Company is cast on both the top and bottom sheaves. Look for it.

Have large sheaves and full sized chain of special material gauged by a patented process which hardens the chain and makes it gear accurately with properly formed sprockets. This precludes the stretching of the chain which, in imitations, quickly destroys their usefulness and safety.

These blocks handle heavy loads readily and are sold at the lowest prices possible for reliable blocks.

In this type the power is applied by pulling directly on slack part of load chain and the power is multiplied by a differential sheave.

Where labor is unimportant and low first cost of the block the chief requirement this is the pattern.

Capacity is figured in tons of 2,240 pounds.

Cap. in Tens Hoist in Feet		72	1 8	1 36 8 36	2 9	9 1/2
Wt. Block, Lbs. †Chain Pull.		3.0	5.0	81	121	179
Lbs		122	216	246	308	557
Feet ,	18				42	38
Complete Extra Hoist	4.80	4.80	5.00	5.40	5.60	6.00

Figures denote pull in pounds required to lift the full load and the number of feet of chain handled to lift the load one foot.

# ROPE HOISTS

BURR SELF-LOCKING



The Burr Self-Locking Tackle Block is a safe, dependable device for any lifting, stretching or pulling job to be done.

Rugged construction, compact and light in weight.

A positive locking device automatically grips the carrying rope the instant tension is released on the pulling rope. The heavier the load the tighter it locks, with absolutely no injury to the rope.

Nos. 3, 4, 5 and 6.

and 6,			5 1/2 , 6 1/2 .		
Nos	3	4	5	6	
Capacity, Lbs	800	1500	2000	2500	
Size Rope, Inches	3%	1/2	56	3/4	
Weight, Lbs	4 1/8	6.1/2	11	17	
Each	\$3.00	5.50	7.00	8.50	
Nos		4 1/2	5 14	6 14	
Capacity, Lbs		3000	3500	5000	
Size Rope, Inches		1/2	56	34	
Weight, Lbs		10	20	2.8	
Each		\$10.00	12.00	14.00	

Prices Include Lower Block.

#### CHAIN HOISTS

#### YALE SPURRED GEAR BLOCK

( Carrier Cooperation

The highest development of the hand hoist principle. They are the safest and speediest hand hoists made. Wear longer, lift easier and quicker, and are safer than other blocks.

Load is held securely at all times and is lowered by reversing the pull on the hand chain.

Steel suspension parts carry the load. Parts are few and of generous proportions. All bearings are large and thoroughly lubricated.

Steel safety hoop and cross head are both designed to swivel and rock.

Die formed and electrically welded steel load chain with smoothly finished links.

These blocks are rated on the long ton basis 2240 pounds to the ton. Each block is tested to a 50% overload before leaving factory but should not be used to lift overloads.

			CHRIII	CHRIII		
Cap.,	Lift.	Weight,	Pull.	Pull.	Com-	Extra
Tons	Ft.	Lbs.	†Lbs.	†Ft.	plete	Hoist
1/2	8	58	62	21	\$70.00	1.80
1	8	92	8.2	31	90.00	1.90
1 1/2	8	132	110	3.5	120.00	2.00
2	9	202	120	42	140.00	2.10
3	10	209	114	7.0	180.00	3.00
4	10	299	124	84	220.00	3.20
5	12	411	110	126	280.00	4.30
6	12	411	130	126	330.00	4.30
8	12	500	135	168	400.00	5.40
10	12	610	140	210	480.00	6.50
12	12	855	130	*126	600.00	8.60
16	12	1041	135	*168	720.00	10.80
20	12	1350	140	*210	850.00	13.00

Chain Chain

"For Each Hand.

†Figures denote pull in pounds required to lift full load and the number of feet of chain handled to lift the load one foot.

### TROLLEYS

PLAIN STEEL



For Use with Chain Blocks

These Trolleys are built with steel suspension members and have the highest degree of safety and ease of operation. The bronze self-oiling or roller bearings are self-aligning. The "equalizing pin" construction allows trolley to be assembled at any point on the I-beam track or crane. Trolleys are regularly

furnished with adjusting washers to fit on I-beam two sizes larger than standard to 8 ton capacity.

#### Roller Bearing

Cap. in Tons	Diam. of Tread of Wheel, In. 3 %	Standard Size of I-Beam, In.	Distance Betw. Sup- ports, Ft.	Weight Trolley, Lbs.	Each
1	4.94	6	14	50	\$25.00 29.00
1 1/2	5 %	7	14	95	39.00
2	6 35	8	15	115	46.00

Can be adjusted to fit I-Beams three sizes larger than Standard.

# WELL WHEELS



Japanned Iron Frame and Wheel, Wrought Iron Hook

#### No. 1-Regular

Dia.	Wheel, In.	10	12
Wt.	Each, Lbs.	5	6
Each	1	81.90	2.30

#### No. 5-Extra Heavy

Diamet	er Whe	el, In	14
Weight	Each.	Lbs	11
Each .			\$4.00
	Open	Stock.	

# HAY FORK PULLEYS



Wrought Steel Frame, Malleable Swivel Eye

Interchangeable Cast Iron Sheave.

No		16
Diameter Sheave,	Inches	5
Weight Each, Lbs	**********	3
Per Dozen		89.00

# IRON SHEAVES



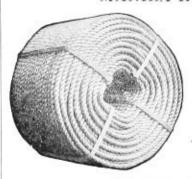


For Regular Blocks

#### Common Iron Bushed

Size Sheave, In.	For Block, Inches	Each
1 ¾ x ½ x ¾	3	\$0.09
2 x ½ x ¾	3 1/2	.10
2 14 x 58 x 38	4	.12
2 3/4 x 3/4 x 3/8	4 1/2	.15
3 x 34 x 38	5	.20
3 1/2 x1 x 1/2	6	.25
4 1/4 x1 x 1/2	7	.30
4 % x1 % x %	41 <sub>2</sub> 5 6 7 8 Thick Mortise, 8	.35
4 % x1 % x %	Thick Mortise, 8	.40
5 1/2 x1 1/4 x 1/8	Thick Mortise, 9	. 45
5 % x1 % x 5%	Thick Mortise, 9	.50
6 1/4 x1 1/4 x 5/8	Thick Mortise, 10	. 55
6 1/4 x1 1/2 x 3/4	Thick Mortise, 10	.65
7 14 x 1 14 x 34	Thick Mortise, 11	.70
7 x1 ½ x ¾	Thick Mortise, 11	.85
8 x1 % x 34	Thick Mortise, 12	.90
8 x1 % x ¾	Thick Mortise, 12	1.05
9 x1 ½ x ¾	Thick Mortise, 13	1.20
9 x1 34 x 34	Thick Mortise, 13	1.35
9 1/2 x 1 5/8 x 7/8	Thick Mortise, 14	1.40
9 ½ x1 % x %	Thick Mortise, 14	1.50
10 x1 % x %	Thick Mortise, 15	1.50
10 x1 % x %	Thick Mortise, 15	1.70
11 x134 x 78	Thick Mortise, 16	1.70
11 x2 1/4 x1	Thick Mortise, 16	2.00

## MANILA ROPE



Made of Extra Strong and Tough Pure Manila Fibre,

We guarantee every coil of Manila rope to be absolutely pure and unmixed with inferior fibre of any kind. It is also free from weighing substances, a n d will be found, upon actual test of strength, size, weight and wearing qualities to be the most economical rope on the market.

#### Price Differentials

	Per	Pound
Diameter	34 in. and Larger Base,	8
Diameter	% in Advance Over Base,	.01
Diameter	16, 1/2 and 16 in Advance Over Base,	.02
Diameter	36 in Advance Over Base,	.03
Diameter	14 and 15 in Advance Over Base,	. 04
Diameter	$_{\gamma\sigma}^{3}$ in Advance Over Base,	.05

#### Three Strand

	In	600	and	1200	Foot	Co	ils.		Per Pound
Diameter—14	· The	. % .	Ϋ́σ.	1/2 - 10	. 5%.	34.	78.	1.	1 %.
144 . 134	. 11	5. 15	6. 1	% and	2 in				8

#### Weight and Strength of Pure Manila Rope

Diameter, Inches Circumference, Inches No. Feet Per Lb Str'gth New Rope, Lbs.	34 43	33	1 1/8 21	1.7	1 1/2	1 34
Diameter, Inches Circumference, Inches., No. Feet Per Lb Str'gth New Rope, Lbs.	7 1/2	2 1/4	2 %	3 14	3 1/2 2 1/3	3 % 21/12
Diameter, Inches Circumference, Inches No. Feet Per Lb Str'gth New Rope, Lbs.	4 1/8 17/12	4 ½ 15%	4 1	76 16	5 14	2 6 56 26900

# WIRE ROPE CLIPS

#### STANDARD



	Black		
Size Rope, In . Wt. 100, Lbs Each	11 11 80.06	12 ½ .06 ½	36 25 . 08 16
Size Rope, In. Wt. 100, Lbs Each	32 \$0.091/2	37 36 3 11 36	58 58 .17
Size Rope, In. Wt. 100, Lbs Each	$^{rac{34}{100}}$ 80.2634	78 149 .3332	$^{1}_{182}$

# WIRE ROPE THIMBLES

	Stane	lard, Gal	lvanized ?	Steel	
	Diameter Rope Weight Per 10 Each	0. Lbs	1.8	2 . 2 . 06	3/8 4.2 .07
	Diameter Rope Weight Per 10 Each	0, Lbs		3 <u>6</u> 9 . <b>09</b>	11 .10
W	Diameter Rope Weight Per 100 Each	), Lbs	5% 16 80 - 11	34 25 . 13	7/8 3 8 , 14
Diam, Rope Wt. Per 10	0, Lbs. 62	1 1/8 9 4	1 1/4 118	$\frac{13}{154}$	1 ½ 2 0 8 - <b>50</b>

### TURNBUCKLES

WITH STUBS



No. 25-Complete with Right and Left Bolt Ends

Drop Forged, Hexagonal.

Each	Total Length, Inches	Length Stub Ends, Inches	Outside Length Buckle, Inches	Diam. Stub Ends Inches
\$0.45	22	8	7 1/8	%
. 50	22	8	7 1/2	36
. 60	22	8	7 %	56
. 78	23	8 1/4	8 1/4	34
. 90	24	9	8 %	76
1.10	2.5	9 1/2	9	1
1.40	25	9 1/2	9 %	1 1/4
1.70	26	10	9 3/4	1 14
2.10	27	101/2	10 1/4	1 36
2.50	27	10 1/2	10 1/2	1 16
3.25	28	11	10 %	1 %
4.00	28	11	1114	1 34

### SMALL TURNBUCKLES



Malleable Iron, with Wrought Hook and Swivel Eye

16	36
. 65	. 85
. 55	. 70
	. 00



#### Cast Brass, with Solid Eyes

Nos	1	2	3	4	5	6
Size Screw, Inches	1/8	32	737	2/2	1/4	40
Movement, Inches	3/4	1 1/4	1 1/2	1 %	2 1/4	2 %
Total Length, Inches	2 1/2	3 1/4	4	4 34	5 1/2	6 1/4
Per Dozen	\$2.20	2.70	3.20	4.80	6.00	8.50



#### Steel with Wire Screws

	Plain			
Nos. Size Screw, Inches Movement, Inches Length Over All, Inches Per Dozen	1 34	$201$ $\frac{1}{16}$ $1\frac{1}{2}$ $4$ $2.00$	$301$ $\frac{3}{2}$ $1.3\%$ $4.1\%$ $2.25$	$\begin{array}{r} \textbf{401} \\ \frac{1}{4} \\ 2\frac{1}{4} \\ 5\frac{1}{2} \\ \textbf{2.50} \end{array}$
Gai	lvanized			
Nos	$110 \\ $2.15$	$\frac{220}{2.40}$	$\frac{330}{2.65}$	$\frac{440}{3.10}$



#### Steel with Steel Screws

						Per	Dozen
No.	601-Plain,	ie in.	Screw,	2 1/2	in.	Movement,	
	Length Over						
	660—Galvani						
No.	701-Plain,	3/8 in.	Screw,	3 1/2	in.	Movement.	
	Length Over						
No.	770—Galvani	zed, Ot	herwise	Same	8.8	No. 701	7.00
		All Ab	dve. One	n Sto	ck.		

# CHAIN LAP LINKS

KEYSTONE PATTERN



#### No. 2530-Malleable Iron, Polished

Nos, For Chain, Inches Eye, Inches Inside Length, Inches Per Dozen	3/8 1 3/8	B 15 15 15 17 17	C 3/8 -7/8 1 7/8	D 18 18 2 % 1.52
Nos For Chain, Inches Eye, Inches	F 1/2 3/4 2.5/8	G 18 18 2 76 2 . 80	H 5% 3% 3 3.60	K 34 1 1/6 3 1/2 5 . 00

# CONNECTING LINKS

#### KEYSTONE



Composed of two similar halves centrally pivoted on same axis. On the inner face of each end they have a lug and a recess which, when closed together, interlock and prevent lateral displacement.



#### Drop Forged from Bar Steel

#### Forge Finish.

Diam. Steel, Inches	34	Ta.	34	16
Length Over All, Inches	1 12	2 1/4	2 1/2	3 14
Width Over All, Inches	18	1 1/8	1 5	1 %
Weight Dozen, Lbs	1	1 1/2	2 1/2	5
Per Dozen	\$2.00	2.25	2.50	4.00

# REPAIR LINKS

END OPEN



No. 150-Wrought Iron Bright Finish

Thickness, In.	20	10	14	1/4	Fe.	3/4
Length, In		1 %	1 %	2	2 1/2	3
Per Gross	\$10.40	11.90	12.60	13.20	17.60	24.40

### CHAIN SWIVELS



#### Malleable Iron, Plain

Nos Length,	Inc	he	8												2	2 1/4
Per Doz	en					 									\$0.60	. 80

# CHAIN HOOKS

#### SLIP



Shaped to permit the Chain to slip easily through the loop.

#### No. 1-Drop Forged, Self-Colored

Per 100		31.3	w.
Size Material, Inches 1 ½ Weight Each, Lbs 7.5	3/4 2 2	76 1 142 3 30 75	

#### GRAB

So shaped that when hooked over a link of the chain they will not slip.



#### No. 2-Drop Forged, Self-Colored

Disc Cities, section.	4 1	% 3%	10	1/2
Size Material, Inches.	2 !	8 %	7/8	1
Weight Each, Lbs	4 7	.5 12.5	2	2.9
Per 100	.70 12	.50 17.60	23.00	31.30
Size Chain, Inches		% 34	7/8	1
Size Material, Inches	1	1/4 1 1/2	1 3/4	2
Weight Each, Lbs		5 9	2.0	50
Per 100	\$59	0.00 90.00	315.00	435.00

# COIL OR CABLE CHAIN



#### Common or Proof Test, Straight Links, Self-Colored

Size, Inches 16	34	ris	36	$\sqrt{\sigma}$
Links Per Foot 125		1034	9 34	8 34
Proof Test, Lbs 104	5 1800	2720	3720	5000
Break, Test, Lbs., 209	0 3600	5440	7440	10000
Safe Working Load. 520	900	1360	1860	2500
Wt. 100 Feet, Lbs. 40	7.0	105	158	210
Per Pound \$0.2	20 .18	. 15 1/2	.13	$-12\frac{1}{2}$
Size, Inches 1/2	5%	34	3/8	1
Links Per Foot 8	6 34	5 5%	4 3/4	4 3%
Proof Test, Lbs 660		14150	19200	24800
Break, Test, Lbs., 1320	00 20000	28300	38400	49600
Safe Working Load, 330		7075	9600	12400
Wt. 100 Feet, Lbs. 27	5 410	580	780	1000
Per Pound 80.	12 .13 1/2	. 13	. 12 1/2	. 12

#### Common or Proof Test, Straight Links, Galvanized

Size, Inches	 16	1/4
Per Pound	 \$0.27	.24



# Proof Grade, Twist Links, Self-Colored

Size, Inches Links Per Foot	12 1/2	14 11 1/2	18 10	3% 9 ½	7 3/4	$7\frac{1/2}{1/4}$
Inside Length, In Inside Width, In	81 15	1 3/2	1 11	1 32	1 18	1 3 3
Wt. 100 Ft., Lbs Per Pound	\$0.2116	75	124 .17	180	225	285 .1334

Not proof tested as this would deform the links. Twisting is considered sufficient test.

# MACHINE CHAIN



#### Bright Finish, Twist Links

Nos	6-0	5-0	4-0	3-0	2-0
Size, Inches		860	20	1.7	3.
Links Per Foot	14	14	14	14	1.5
Tensile Strength, Lbs.	3420	2660	1990	1760	1510
Wt. 100 Feet, Lbs	7.3	5.7	4.0	34	3.0
Per 100 Feet	\$25.00	22.50	15.00	13.50	13.00
Nos	0	1	2	3	4
Size, Inches		10/54	€4	1/4	$n^7x$
Links Per Foot	16	16	17	18	1.8
Tensile Strength, Lbs.	1310	1140	1000	875	750
Wt. 100 Feet, Lbs	27	2.2	18	16	15
Per 100 Feet	\$12.50	12.00	12.00	12.00	12.00
100	Foot I	engths			

# COIL CHAIN LIBERTY PATTERN





#### Twist Link, Bright Finish

Nos	000	00	0	1	2	3
Size, Inches	13	18	11	10/14	114	24
Links Per Foot	9	9	9	10	10	10 1/2
Tensile Strength, Lbs.	1760	1430	1290	1080	950	830
Wt. 100 Feet, Lbs	3.2	28	2.5	22	18	13
Per 100 Feet	\$9.00	8.50	8.00	7.50	7.00	7.00
100	Foot	Lengt	hs.			



### Straight Links, Bright Finish

Nos	000	00	0	1	2	3
Size, Inches	17	18	11	3/2	32	84
Links Per Foot	14 1/2	15 1/4	16%	19	1936	19 %
Tensile Strength, Lbs.	1760	1510	1310	1140	1000	875
Wt. 100 Feet, Lbs	3.7	3.2	28	23	20	16
Per 100 Feet	89.00	8.50	8.00	7.50	7.00	7.00
	Foot					

#### AMERICAN



#### No. 1.

Flat Steel,	Bright	Finish	
Nos	1	3	5
Tensile Strength, Lbs	960	6.5	0 510
Weight Per 100 Feet, Lbs.	10		6
Per 100 Feet	\$7.50	5.5	50 4.75
Nos	7	8	113
Tensile Strength, Lbs	395	33	0 1060
Weight Per 100 Feet, Lbs.	3 1/2	3 1	12 1/2
Per 100 Feet	83.75	3.5	8.00

10 Foot Lengths.

# COIL CHAIN



No. 00.

#### Plain, Weldless Steel Wire

Nos	5-0	4-0	3-0	2-0	0
Wire Decimal, Inches.	.179	.163	.147	.133	.118
Length Link, Inches	2 3	2.3	1 1 2	1 3/4	1 1/2
Tensile Strength, Lbs.	3250	2200	1900	1650	1500
Weight 100 Ft., Lbs	33	3 0 36	26	21	17
Per 100 Feet	\$9.00	7.50	6.25	5.00	4.50
Nos		1	2	3	4
Wire Decimal, Inches		.105	.094	.083	.072
Length Link, Inches				1 1/4	1
Tensile Strength, Lbs			900	750	550
Weight Per 100 Ft., Lbs			10	8	6
Per 100 Feet		\$4.00	3.50	3.50	3.50
100	Foot L	engths.			

#### BROWN



#### Sherardized, Weldless Steel Wire

Nos	00	000
Wire Decimal, Inches	.133	.147
Length Link, Inches	2	2.3%
Tensile Strength, Lbs	1200	1600
Weight 100 Feet, Lbs	19	2.3
	\$4.00	5.00

250 Feet on a Reel.

# PUMP CHAIN



Galvanizad, Open Link

No. 6-.192 in. Wire, About 30 Lbs. Per 100 Pounds 100 Pounds in a Keg.

# PORCH SWING CHAINS BULLDOG Y TYPE

These Chains are used on Porch or Swinging Settees. The upper or Main Branch can be secured to a hook in the celling while the two short branches are fastened to the base or arm of the swing.

Made from Bulldog Pattern Chain. Galvanized Polished Bright (G. P. B.) Finish. Per Set

No. 454—Top Piece and Branches 2/0 Chain, Tensile Strength 1200 Lbs., Safe Working Load of Single Chain 240 Lbs., Weight Per Set 3.8 Lbs. 80.85

A Set consists of two Y Chains and two Ceiling Hooks,

One Set in a Carton.

# PORCH SWING CHAINS BULLDOG STRAIGHT TYPE



Galvanized Polished Bright (G. P. B.) Finish

No. 1075—Size 2/0 Chain, Length 7½ ft., Tensile Strength 1200 Lbs., Safe Working Load Single Chain 240 Lbs., Weight Per Set 2¾ Lbs......\$1.50 Set Consists of Four Straight Chains, Four S Hooks and Two Ceiling Hooks.

One Set in a Box.

# COW TIES

оню

Weldless Ohio Pattern, Bright Finish

With Two Toggles and a Swivel.



# TIE-OUT CHAINS

BROWN



Bright Finish, Fitted with Stake Ring and Snap. Swivel Every 10 Feet.

Nos. Length 20 Ft. Length 30 Ft. 2-0 3-0 2-0 3-0 Weight Each. Lbs. 3½ 4¼ 5 6 Per Dozen \$12.00 14.50 17.00 21.50

One in a Canvas Bag.

# HALTER CHAINS

BROWN



Plain, Weldless Steel Wire

	4 1/2 Feet		1	6 Feet	
	Weight	Per		Weight	Per
Nos.	Doz., Lbs.	Dozen	Nos.	Doz., Lbs.	Dozen
6/0	22	87.50	6/0	27	89.50
5/0	20	6.50	5/0	2 4	8.00
4/0	16	5.50	4/0	1936	7.00
3/0	12 %	4.75	3/0	1634	6.25
2/0	10	4.25	2/0	13 1/6	5.50
0.	8	3.75	0	10 %	4.75
1	6 14	3.50	1	8	4.25
2	5 14	3.25	2	6 %	4.00
3	4	3.25	3	5 14	4.00
4	3 1/4	3.15	4	4	3.75
5	3	3.15	5	3 34 .	3.75
6	2 1/4	3.00	6	2 3/4	3.65
7	1 3/4	3.00	7	2 1/4	3.65

One Dozen in a Carton.

# HALTER AND DOG CHAINS

AMERICAN



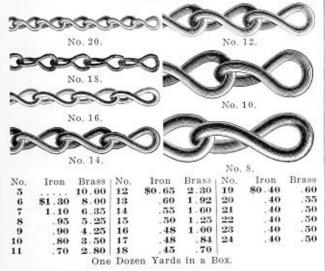
Polished Steel Lock Ring, Patent Interlocking Links, with Snap, Swivel and Toggle.

Halter Chain sizes Nos. 4/0 to 1/0 inclusive, Dog Chain sizes Nos. 1 to 8 inclusive.

		35 Feet-		6 Feet				
	App. Wt.	No. in	Per	App. Wt.	No. in	Per		
Nos.	Doz., Lbs.	Cart'n	Dozen	Doz., Lbs.	Cart'n	Dozen		
4/0	14	6	89.00	18	6	\$11.50		
3/0	14	6	8.00	18	6	10.00		
2/0	11	6	7.50	14	6	9.50		
1/0	11	6	6.50	14	6	8.00		
1	7.34	12	5.75	9 1/2	12	7.25		
2	7 %	12	5.25	9 1/2	1.2	6.75		
3	6	12	4.75	7.34	12	6.00		
4	6	12	4.50	7 1/4	12	5.50		
5	4	12	4.00	5	12	5.00		
6	4	12	3.50	5	12	4.50		
7	2 34	12	3.50	3 1/2	12	4.50		
8	2 1/2	12	3.50	3	12	4.50		

# SINGLE JACK CHAIN

Cuts Full Size.



# DOUBLE JACK CHAIN

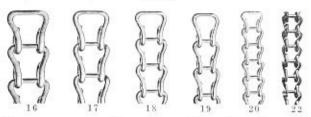
Cuts Full Size.



	1	No. 14.				No.	20.	
No. 10 11 12 13 14	Iron 80.95 .85 .72	Brass 4.75 3.77 3.20 2.50 2.05	15 16 17 18 19	.53 .51 .48	1.60 1.32 1.10 .90 .76	20 21 22 23 24	Iron \$0.45 .45 .45 .45 .45	.72 .70 .70 .70

# LADDER CHAIN

BRASS



# SAFETY CHAIN

BRASS



	140. 0.			140. 2.	
	Brass		Nic	kel Plated,	Brass
		Per			Per
		Dozen			Dozen
Nos.	Gauge	Yards	Nos.	Gauge	Yards
00	.017	\$1.45	00	.017	\$1.65
0	.021	1.80	0	.021	2.00
1	.028	2.25	1	.028	2.40
1 2	.035	2.90	2	.035	3.30
	On	e Dozen Ya	rds in a	a Box.	

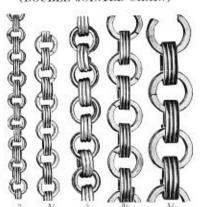
# PLUMBERS CHAIN



Navy Style Links

1.0	Brass	Nickel Plated, Brass
	Per Doz. Yards	Per Doz. Yards
No.	3\$3.60	No. 3\$4.00
		No. 4 4.65
	One Dozen V:	ords in a Roy

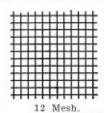
# UNIVERSAL CHAIN (DOUBLE JOINTED CHAIN)

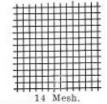


#### Retinned

100 Feet in a Package.

# SCREEN WIRE CLOTH





#### BLACK PAINTED

Bright Steel Wire, Uniform Weave, Smooth Black Surface.

#### SILVER

Galvanized After Weaving. Silver Color. 18 to 48 in. Widths (Even Numbers). 12 Mesh—Per 100 Square Feet.......\$4.00 100 Lineal Feet in a Roll.

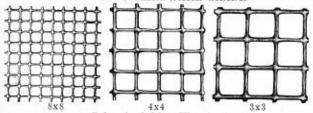
#### BRONZE

Contains practically 90 % copper balanced with remaining percentage of zinc. 18 to 48 in. Widths (Even Numbers).

Square Feet in a Roll and Approximate Weight Per Roll of 100 Lineal Feet

Width, Inches	18	20	22	24	26	28
Sq. Feet in Roll	150	166%	183 3/4	200	216 %	2331/4
12 Mesh, Lbs	15	17	18 1/2	20	22	23 1/2
14 Mesh, Lbs	171/2	181/2	21	23	25	27
Width, Inches		30	32	34	36	38
Sq. Feet in Roll		250	266%	2831/3	300	316%
12 Mesh, Lbs		25	27	29	30	32
14 Mesh, Lbs		29	31	33 1/2	35	37
Width, Inches		40		44	46	48
Sq. Feet in Roll				366%		400
12 Mesh, Lbs	1000	33 1/2	35	36 1/2	38 1/2	40
14 Mesh, Lbs		39	41	43	45	46 1/2

# GALVANIZED WIRE CLOTH



Galvanized After Weaving In Rolls of 50 and 100 Lineal Feet.

 Nos.
 8
 4
 3
 2

 Mesh, Inches
 ½
 ½
 ½
 ½

 Wire Gauge, Nos.
 27
 23
 20
 19

 Width, Inches
 ... 24,30,36,48
 24,30,36
 24,30,36
 24,30,36

 Per 100 Sq. Feet
 \$9.50
 8.00
 7.50
 7.00

### BRASS STRAINER CLOTH



In Rolls, 12 in. Wide, 5 ft. Long

Mesh Nos. . . . . . 24 30 40 50 60 70 80 100

Gauge Wire, Nos. . 30 31 33 35 36 37 38 40

Per Square Foot. 80.30 .35 .40 .45 .50 .55 .75 1.00

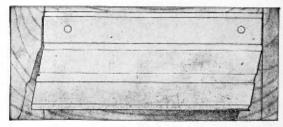
#### WEATHER STRIP

#### NUMETAL

Made of a specially prepared spring metal, laboratory tested for temper. So shaped and designed that they will hold their tension and resiliency during the life of the building under ordinary use. Automatically adjust themselves to every weather condition, taking care of all shrinkage and expansion of sash, keeping the cracks sealed, and the wind, dust and rain outside. Simple, effective and economical. Not necessary to remove the window sash from the frame to install.

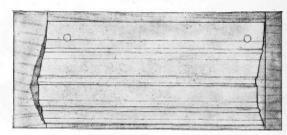
Complete Instructions for installing furnished with each order.

#### Style "A" and "D"



Cut Shows Style "A".

#### Style "B"



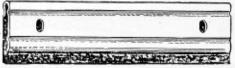
Cut Shows Style "B",

Note—Numetal Weatherstrip is furnished complete with nails in stock lengths of 7 feet. We can furnish special lengths on large orders.

Average Weight Per 100 Feet, 4 1/2 Pounds.

#### STYLE "E"

#### Door Bottom Strip



Made of Heavy Brass, Water and Moth Proofed Felt with Slotted Holes.

May be put on either the outside or inside of door bottom.

Simple instructions for installing furnished with each order.

Complete with Solid Brass Screws for Installing.

 WEATHER STRIP DOUBLE CONTACT, FELT

Made with fine selected smooth wood moulding and heavy all wool felt, glued to the bottom of the moulding. Nails are driven through the strip (Moulding and felt) which firmly holds the felt for all time, leaving no chance of its loosening after glue has dried out. A double contact strip as the felt makes a double contact with the window stop and sash. Dust, cold and wind proof.



No. 70.

#### Walnut Stained

Per Foot No. 70-Width of Moulding % in., for Upper Sash of Windews, Wt. Per Bundle 17 1/2 Lbs. . \$0.05 500 Feet in a Bundle.

No. 71-Width of Mould-

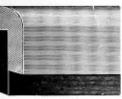
Per Foot

Per Foot



ing % in., for Lower Sash of Windows, Wt. Per Bundle 22 1/2 Lbs.. \$0.05 500 Feet in a Bundle.

No. 71.



No. 71 16.

Per Foot No. 7112 - Width of Moulding % in., for Sides and Top of Door, Weight Per Bundle 32 1/2 

500 Feet in a Bundle.



No. 75-Width of Moulding 14 in., for Bottom of Heavy Doors, Weight Per Bundle 23 ½ Lbs. . \$0.12 250 Feet in a Bundle,

No. 75.

FLEXIBLE ALL RUBBER Moulded in One Piece, with Cloth Insertion, Requires No Sawing, Cementing or Stitching



Cut Shows No. 8, % in.



Cut Shows No. 9, 1/2 in.

#### For Upper Sash of Windows

Per Foot No. 8-% in. Wide, Weight Per 1000 ft. 20 Lbs...\$0.05 One Coil of 50 Feet in a Box. For Lower Sash of Windows No. 9-1/2 in. Wide, Weight Per 1000 ft. 25 Lbs... .06 One Coil of 50 Feet in a Box. For Sides and Tops of Doors No. 10-34 in. Wide, Weight Per 1000 ft. 35 Lbs... One Coil of 50 Feet in a Box. For Bottom of Door No. 11-1 in. Wide, Weight Per 1000 ft. 45 Lbs.... .10

One Coil of 50 Feet in a Box.

WEATHER STRIP BOSLEY WOOD AND FELT COMBINED



(Reduced Cut)

#### Walnut Stained

Per Foot No. 62—Width of Moulding ¾ in., for Center of Window, Weight Per Bundle 25 Lbs.......\$0.08 500 Feet in a Bundle.

#### BOSLEY "IMPROVED SERVICE"



No. 501.

Made of Fabric impregnated and surfaced with Pure Rubber. Filled with uniform cushion of best quality Cotton wicking.

A perfect insulation for all uses against weather conditions. Only hammer and tacks needed to apply.

Finish, Weight Per 1000 ft. 55 Lbs..... 50 Feet in a Box.

#### CUSHION ALL FELT



No. 18.



No. 19.

Tacks, Hammer and Shears are all that are necessary for applying. Stitched for blind nailing. Per Foot

No. 18-1/2 in. Wide, for Sides of Window, Weight Per 1000 ft. 15 Lbs......\$0.03 50 Feet in a Box.

No. 19-% in. Wide, for Sides and Top of Door, Weight Per 1000 ft. 18 Lbs...... . 03 1/2 50 Feet in a Box.

No. 20-% in. Wide, for Bottom of Door, Weight Per 1000 ft. 21 Lbs..... 50 Feet in a Box.

#### G-B FELT STRIPPING



Prevents draughts coming in through windows and doors.

Guarantees absolute comfort by keeping the cold air out and the warm air in.

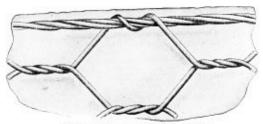
Also prevents windows from rattling.

Easy to attach and stays in place.

Per Carton No. GB- % in. Wide . . . . . . . . . 10 Feet in a Carton.

# POULTRY NETTING

GALVANIZED STEEL WIRE

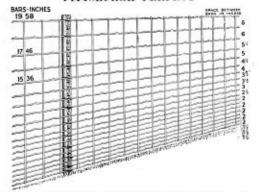


Full Size Cut of 1 in. Mesh. Galvanized After Weaving

Prices Per Roll of 150 or 50 Lineal Feet.

	PFICE	es rer	Ron o	1 100	01 9	o Lin	car re		
		1 in	. Mesl	i, No.	20	Wire			
Width.	Inches	8	. 1	2	18	4	24		30
150 ft.	Rolls.		. 84	.95	7.1	12	9.08		0.83
50 ft.	Rolls		. 1	.90	2.7	59	3.28		3.86
Widels	Inches	2	- 3	6	45	4	60		72
150 ft.	Rolls		. 812	.38	16.	50	20.63	2	4.75
50 ft.	Rolls		. 4	.38	5.	75	7.13		8.50
		1 1/2	in. Me	sh, No	, 18	Wire			
Width,	Inches								72
150 ft.	Rolls							. \$2	4.75
50 ft.	Rolls								8.50
		2 in	. Mesl	a. No.	20	Wire			
Width,	Inches	8 12	18	24	30	36	48	60	72
150 ft.	Rolls	82.14	3.08	3.92 4	1.68	5.35 7	.13 8	.91 1	0.69
50 ft.	Rolls	. 96	1.28	1.56 1	1.81 2	2.03 2	. 63 3	.22	3.83
		2 in	. Mesl	. No.	16	Wire			
Width,	Inches							over end of	72
150 ft.	Rolls							. \$2	4.75
50 ft.	Rolls								8.50
		Sq	uare I	eet in	n a R	oll			
Width,	In	12	18	24	30	36	48	60	72
150 Lin	. Ft	150 3	225 3	100 5	375	450	600	750	900
50 Lin	. Ft	50	75 1	00 ]	125	150	200	250	300

# POULTRY AND GARDEN FENCE



Maximum strength, economy and durability are combined in this widely popular poultry fence. It is easily erected, requires few posts and saves the expense of top rails and bottom boards.

The electrically welded joints eliminate wraps, ties and surplus weight, affording a neat, one-piece fence fabric. Super zinced.

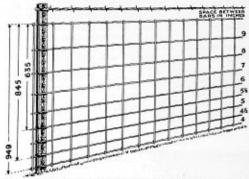
#### Special

Top and Bottom Wires No. 11 Gauge, Other Wires No. 14 Gauge, Distance Between Stay Wires 6 in.

TA CHURGO: Delication			
Nos	1958	1746	1536
No. of Bars		17	15
Height, Inches		46	3 6
App. Weight Per Rod, Lbs.		7.8	6.7
Per 10 Rods	\$9.40	8.20	7.20
Ten Rods	in a Roll		

# FARM AND SHEEP FENCE

PITTSBURGH PERFECT



This design affords effective enclosures for cattle, horses and sheep. Where close mesh is not required, this fence is very practical and economical.

Electrically welded joints. Super zinced,

#### No. 9 Gauge

All Wires of No. 9 Gauge, 12 in. Between Stays.

Nos	949-9	845-9	635-9
No. of Bars	9	8	6
Height, Inches	49	4.5	35
App. Weight Per Rod, Lbs.		11.5	8.8
Per 10 Rods	\$9.80	8.80	6.80
Ten Rods	in a Ro	11.	

#### No. 11 Gauge

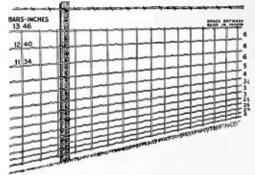
No. 9 Gauge Top and Bottom Wires, All Other Wires No. 11 Gauge, 12 in. Between Stays.

Nos	949-11	845-11	635-11
No. of Bars	9	8	6
Height, Inches	49	45	35
App. Weight Per Rod. Lbs.		8.1	6.3
Per 10 Rods	\$7.20	6.60	5.30

Ten Rods in a Roll.

# HOG AND CATTLE FENCE

PITTSBURGH PERFECT RAZORBACK



This style is popular for barring razorback hogs, the purpose for which it was especially designed. It is also used extensively for barnyards. Its general fine mesh, and the close spacing of the lower-line wires turn the smallest pigs, and half and full-grown chickens.

Electrically welded joints. Super zinced.

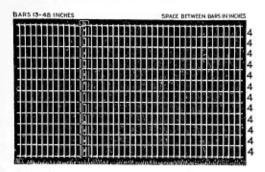
#### No. 121/2 Gauge

Top and Bottom Wires No. 10 Gauge, All Other Wires No. 12 & Gauge, 12 in Between Stays

Nos	1346	1240	1134
No. of Bars		12	12
Height, Inches		40	34
App. Weight Per Rod, Lbs	8.1	7.5	6.8
Per 10 Rods	\$7.20	6.60	6.00
Ten Rods	in a Roll.		

00000000000000000

# LAWN FENCE PITTSBURGH PERFECT



Pittsburgh Perfect Close Mesh Lawn Fence is widely known for its adaptability to a great number of uses. is an attractive lawn fence, the close spacing of both line and stay wires giving it the obvious quality of snug protection. Non-climbable. Electrically welded.

It is a popular inclosure for gardens, orchards, barn-yards, poultry runs, parks and cemeteries. Its miscellaneous uses include stall guards, grape arbors, trellises, tree and window guards, tennis courts and wire corn cribs.

#### Plain, Close Mesh

Made entirely of No.	1 Gauge	Wires.	Stay	Wires
1% in. apart. Super-zinced	l.		0.000	
Nos	1036P	1140P		1348P
No. of Bars	10	11		13
Height, Inches	36	4.0		4.8
App. Wt. Per 100 Ft., Lbs.	112	124		147
Per 100 Feet	\$11.50	12.00		14.30
100 and 150 Lin	eal Feet i	n a Roll		

## WALK GATES

#### PITTSBURGH PERFECT

Heavy Steel Tubing Frame, Corners held by Heavy Castings.

Covered with Pittsburgh Perfect Double Scroll Ornamental Lawn Fence.

#### Zine Galvanized

Complete with fittings for wood posts. Steel post fittings are extra.

5 14

.50

Width Opening, Feet 3	3	3	3 16	3 16
Height, Inches 36	42	48	36	42
Weight Each, Lbs 21	22	2.5	26	27
Each \$4.7	0 4.80	5.00	5.40	5.60
Width Opening, Feet	. 3 1/2	4	4	4
Height, Inches		36	42	48
Weight Each, Lbs	. 29	28	29	30
Each		5.80	5.90	6.00



Built like a railroad rail giving it greater strength in all directions than it is possible to secure in any other section of equal weight.

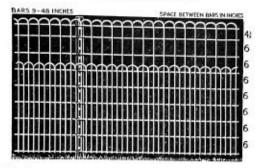
Anchor plates are 3 1/2 x9 in, riveted lengthwise on the stem of the post.

Frequent notches on the face of the post make it possible to fasten any or every line wire with special hump clamps, which are easily attached.

Each ..... \$0.50 V

# ORNAMENTAL LAWN FENCE

PITTSBURGH PERFECT



All wires are neatly and inseparably welded at every contact point. Closely spaced upright wires keep the fence always trim and erect

Scrolls cannot pull out because each is welded to the next corresponding wire.

Close Spacing keeps out small chicks and makes the fence non-climbable. Add to the beauty of any lawn.

# Special Ornamental, Double Scroll, Super-zinced

Spacing between upper pickets 2 % in., spacing between lower pickets 1% in., made entirely of No. 9 wire.

					ar attent of Hard.	
Nos				736X	842X	948X
Height, Inches				3.6	4.2	48
Number of Bar	rs			7	8	9
App. Wt. Per 1	0.01	Ft.,	Lbs	161	188	215
Per 100 Feet				\$16.00	17.75	20.00
1	0.0	and	150 I	Feet in a	Roll.	<b>E</b> 20

## FENCE POSTS STUDDED TEE, LINE

Pittsburgh Perfect Line Posts have studs formed on them to hold the fence wires in place. The posts are actually strengthened by these studs, instead of being weakened by holes or slots for staples.

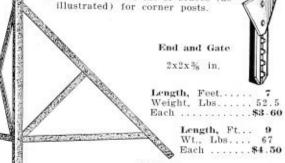
Wire fasteners are furnished with the posts. The fasteners have greater strength than staples, and are easily attached with an ordinary hammer.

# Open Hearth Steel, Metallic Enamel Finish.

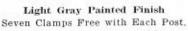
1	% X1 % X3	Xor in.		
Length, Feet	6 34	7	7 16	8
App. Wt., Lbs		9.98	10.65	11.31
Each	. \$0.65	. 70	.75	.80

#### END, GATE AND CORNER Angle Type

Made of Open Hearth Steel Metallic Enamel Finish. To be set in Concrete. Furnished complete with a single set of braces for end and gate posts, and with a double set of braces (as



							C	a	E.	n	e	ı,					
					2	X	2	X	3	16		i	n.				
Length,	Feet		9	,						-						7	9
Weight,	Lbs.		्					,						·	٠	84	105
Each																\$5.70	7.15



# FLOWER BED AND LAWN BORDER

PERFECTION



No. 9 Heavily Galvanized Wire Pickets, Spaced 3 in. Apart

No. 13 Heavily Galvanized Cables Spaced 6 in. Apart Except Two Top Cables which are Spaced 2% in. Apart.

Per Lineal Foot No. 316-16 in. High, 3 Cables, Weight Per Foot 

No. 422-22 in. High, 4 Cables, Weight Per Foot 

No. 528-28 in. High, 5 Cables, Weight Per Foot 

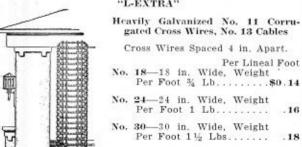
This fabric is also much used in cemeteries around grave lots, also for lawn and curbway border, making a very pretty protection for this purpose.

The bottom of pickets are left straight to be inserted in the ground, making it very easy to place fabric in position.

10 and 20 Rods in a Roll.

## FLOWER AND VINE TRELLIS

"L-EXTRA"



Practical and durable in construction, and very attractive in appear-Just the thing for climbing vines and flowers. Being made of heavy wire, it retains its shape perfectly, therefore is easily placed in position and will last indefinitely.

10 Rods in a Roll.

# TREE GUARDS

NORWOOD

Frotects young trees in public parks, sub-divisions, golf links, boulevards, private grounds,

Substantially made.

No. 7 Heavily Galvanized Wire Woven Together with No. 12 Galvanized Wire Cable

Per Dozen No. 2-Diameter 12 in., Height 72 in., 

Open Stock.

# BARBED WIRE

PITTSBURGH PERFECT



Four Point, Round Barbs

Cattle, Galvanized, Barbs 5 in. Apart.

12 1/2 Gauge.

Per Spool

80 Rod Spools-Weight Per Spool About 90 Lbs.. \$5.85 100 Ft. Coils-Weight Per Coil About 6 % Lbs.... 1.25

## CABLE OR TWISTED WIRE



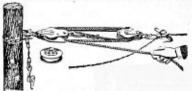
Two Strands, No. 121/2 Wire

Per Spool Galvanized-On 80 Rod Spools, Weight Per Spool About 70 Lbs..... ...\$4.90

Note-For Poultry Netting Staples and Fence Staples Refer to Page 303.

## WIRE STRETCHERS

GIANT STAR, JR. TACKLE BLOCK



Roller Bearing, Gray Enamel Finish

Quick, absolutely sure, never slips, for the heavier the pull the better the lock holds. A one pound pull on the rope is equal to four pounds on the wire. Self-supporting from the post and locked and unlocked by a simple right or left movement of the hand.

No. 714—Large Steel Blocks, 2 ½ in. Diameter Sheaves, Heavy Malleable Iron Straps, Removable Steel Axles, Hardened Roller Bearings,

Equipped with Improved Wire Clamp, Chain and 20 ft. ½ in. Manila Rope, Shipping Weight 

Open Stock.

#### TOWNSEND



Each

Townsend-3 ft. Hardwood Handle, Malleable Iron Pinchers, wtih Serrated Steel Grips, Warranted Not to Slip, Weight Per Dozen 45 Lbs......\$2.00

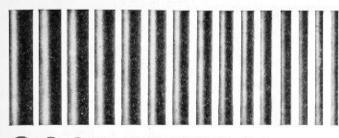
With this implement the person stretching the wire can nail it to the post from which he is stretching without assistance.

It stretches to the last post at the end of the fence as well as to any other.

Also very convenient for tightening bands and wire on large shipping boxes, bales and crates.

Open Stock.

# PLAIN FENCE WIRE





Cuts Show Actual Size of Wire. Base \$.... Cwt.

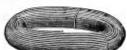
Advances Over Base, Price Per 100 Lbs., In 100 Lb. Bundles ..... 1 to 5 6 to 9 10 12 11 For Annealed Wire ... \$0.15 .30 .15 20 .25 For Galvanized Wire.. . 85 .60 .65 .70 .80 For Galvanized Wire.. .95 1.15 1.45 1.65 2.00 2.50

# TABLE SHOWING SIZE, WEIGHT AND LENGTH OF WIRE

Gauge Nos.	Diameter, Inches	Feet in 100 Pounds	Weight 100 Feet, Lbs.	Weight Mile, Lbs.
1	.2830	468	21.36	1128
2	.2625	544	18.38	970
3	.2437	631	15.84	836
4	.2253	738	13.54	715
5	.2070	875	11.43	603
6	.1920	1017	9.832	519
7	.1770	1197	8.356	441
8	.1620	1429	7.000	369
9	.1483	1705	5.866	309
10	.1350	2057	4.861	256
11	.1205	2582	3.873	204
12	.1055	3369	2.969	156
13	.0915	4485	2.233	117
14	.0800	5858	1.707	9.0
15	.0720	7232	1.383	73
16	.0625	9598	1.042	5.5
18	.0475	16620	.600	32

Weights and lengths given are approximate, to aid in ordering, but are not guaranteed.

# MARKET WIRE



Price Per 100 Lbs. 100 Pounds in a Bundle.

Sizes	Bright	Coppered	Tinned
0 to 5	\$6.55	87.65	\$8.95
6	6.45	7.55	8.85
7	6.45	7.55	8.85
8	6.45	7.55	8.85
9	6.65	7.55	8.85
10	6.75	7.65	8.95
11	7.05	7.75	9.05
12	7.15	8.05	9.15
13	7.35	8.25	9.55
14	7.75	8.75	10.25
15	8.15	9.45	11.15
16	8.75	9.85	12.05
17	9.25	10.85	13.05
18	10.25	11.85	14.05

# STONE WIRE



Put up in 8 in, inside diameter coils, weighing 12 pounds each.

Price Per 100 Pounds

Steel Wire Gauge	Black An- nealed	Galvanized	Tinned
16	89.40	\$11.90	\$12.40
17	10.40	12.90	13.40
18	11.00	13.50	14.00
19	11.20	14.10	14.60
20	11.40	14.30	14.80
21	11.60	14.80	15.00
22	12.00	15.20	16.00
23	14.20	18.00	18.50
24	14.60	18.50	19.60
25	15.20	19.70	20.70
26	16.20	21.10	22.70
27	17.20	22.70	24.20
28	17.70	23.70	25.40
29	18.20	24.70	26.40
30	18.70	27.20	28.20
31	19.70	28.70	29.70

## COPPERED STEEL SPRING WIRE

100 Pounds in a Bundle

Nos	00 to 9 \$11.50		
Nos	$^{13}_{\$12.50}$		

12 Pounds in a Stone

# BRASS WIRE

IN COILS



# Spring Brass and Soft Brass Brown & Sharpe's Gauge.

Base Price \$ . . . . Per 100 Pounds.

Gauge Nos.	Diam., Inches	Advance Over Base Per Lb.	Gauge Nos.	Diam., Inches	Advance Over Base Per Lb.
8 and Larger 9 10 11	.1285 and Larger .1144 .1019 .0907	Base \$0.01 .01 .01	17 18 19 20	.0453 .0403 .0359	. 03 1/2 . 03 1/2 . 04 1/2 . 04 1/2
12	.0808	.02	21	.0285	. 05 1/2
13 14	.0720	.02	22 28	.0254	.05 1/2
15 16	.0571	.03	24	,0201	. 06 1/2

#### Extras for Quantities Less than 200 Pounds.

			Per Pound			Per Pound
199	to	100	Lbs80.02	49 to	25	Lbs\$0.10
						Lbs
			Lbs05			

#### SOFT COPPER WIRE



#### IN COILS Round, Solid, Bare

Brown & Sharpe's Gauge, Per 100 Pounds 

9276733440		Advance	1225		Advance
Gauge	Diam.	Over Base	Gauge	Diam.	Over Base
Nos.	Inches	Per Lb.	Nos.	Inches	Per Lb.
0000 to	.460	Base	16	.0508	80.0134
8	.1285	Dase	17	.0452	. 01 36
9	.1144	\$0.00%	18	.0403	. 01 34
10	.1019	. 00 36	19	.0359	.02
11	.0907	. 00 %	20	.0319	.0234
12	.0808	. 00 %	21	.0284	. 02 34
13	.0719	. 00 76	22	.0253	. 03 16
14	.0641	.01	23	.0225	. 03 34
15	.0570	. 01 34	24	.0201	.0434
	Extras for	Quantities	Less Than	200 Pot	100

# 49 to 25 Lbs..... Under 25 Lbs.... SPOOL WIRE

99 to 75 Lbs..... 74 to 50 Lbs.....



#### Annealed Black Wire

14 Lb. Spools. 18 20 22 24 26 28 Gauge Nos. 16 .90 1.02 1.10 1.14 1.20 1.22 1.34 Per Dozen., \$0.96 ½ Lb. Spools. 18 20 22 24 Gauge Nos. 16 26 Per Dozen. \$1.58 1.64 1.68 1.80 1.94 2.04 2.13 2.35

Annealed Tinned Wire

¼ Lb. Spools. 18 20 22 24 Gauge Nos. 16 26 28 Per Dozen. 81.20 1.20 1.25 1.32 1.40 1.50 1.65 1.78

Soft Brass Wire

¼ Lb. Spools, 8 20 22 24 26 Gauge Nos. 16 18 28 30 Per Dozen. \$2.20 2.20 2.20 2.40 2.60 2.70 3.46 4.20

Spring Brass Wire

¼ Lb. Spools. 18 20 22 24 26 Gauge Nos. 16 28 Per Dozen. \$2.20 2.20 2.20 2.40 2.60 2.70 3.46 4.20

Soft Copper Wire

Gauge Nos. 16 18 20 22 24 26 28 30 Per Dozen. \$2.20 2.20 2.20 2.40 2.60 2.70 3.46 4.20

Gauge Nos. 16 18 20 22 24 26 28 30 Per Dozen. \$3.90 3.90 3.90 4.40 4.70 4.90 6.12 7.44 All Above, One Dozen Spools in a Box.

#### HAIR WIRE



- 1	21			k
	ъ,	-64	æ	n.

S 775	1	Ounce Sp	ools.		
Gauge Nos Per Gross		30 3 . 75 Tinned	$\frac{32}{4.00}$	$\frac{34}{4.25}$	$\begin{matrix} 36 \\ 5.25 \end{matrix}$
	1	Ounce Sp	ools.		
Gauge Nos Per Gross	$\frac{28}{84.25}$	30 4.50	32 4.75 s in a Box	34 5.00	$\begin{matrix} 36 \\ 6.00 \end{matrix}$

# MUSIC STEEL SPRING WIRE



A Fine Polished Wire for Musical Strings, etc., recommended also for Highly Finished Springs and similar mechanical uses.

Suitable for Cutting Wires.

#### One Pound Coils

	Diam-	Ft. Per	Per	1	Diam-	Ft. Per	Per
No.	eter	Pound	Pound	No.	eter	Pound	Pound
1	.010	3749	\$7.50	24	.055	124	\$1.20
2	.011	2936	6.00	25	.059	108	1.20
3	.012	2604	5.00	26	.063	94	1.20
4	.013	2218	4.00	27	.067	83	1.20
5	.014	1913	3.50	28	.071	74	1.20
6	.016	1465	3.00	29	.075	68	1.20
7	.018	1157	2.75	30	.080	58	1.20
8	.020	937	2.50	31	.085	54	1.20
9	.022	775	2.25	32	.090	51	1.20
10	.024	651	2.00	33	.095	46	1.20
11	.026	560	1.80	34	.100	43	1.20
12	.029	447	1.80	35	.106	39	1.20
13	.031	391	1.60	36	.112	36	1.20
14	.033	344	1.60	37	.118	34	1.20
15	.035	305	1.60	38	.124	32	1.20
16	.037	274	1.40	39	.130	29	1.20
17	.039	247	1.40	40	.138	27	1.20
18	.041	223	1.40	41	.146	23	1.20
19	.043	203	1.20	42	. 154	21	1.20
20	.045	185	1.20	43	.162	18.5	1.20
21	.047	170	1.20	44	.170	17	1.20
22	.049	156	1.20	45	.180	16.6	1.20
23	.051	144	1.20			-0.0	

# STOVE PIPE WIRE



#### Dark Annealed

	100 1 00	C0118.		
Wire Gauge	Nos	18	19	20
Per Dozen	Coils	\$0.48	.42	. 36
	One Dozen Coil:	s in a Box.		

# INSULATED BELL WIRE



#### Assorted Colors

		3.564	. 4	. 0		u	а	u	g	e.		C	10	Ιt	to	r	1	γ	V)	ra	p	p	9	d.							
3 3755		ğ.																				8	P	e	r	D	0	24	91		Spool
oot !	Spoo	ols.	0																												\$2.50
oot !	Spo	ols.		. ,															٠.												4.40
oot :	Spoo	ols.						,	,																						7.75
١	oot	oot Spoc	oot Spools	oot SpoolsPer D	oot SpoolsPer Do	oot SpoolsPer Doze	oot SpoolsPer Dozer																								

Our Stock of Wire Includes a Type and Size for Every Requirement Send Us Your Orders.

### SPRING STEEL



#### FLAT TEMPERED

For Locks, Etc.

Catch Weight Bundles

Width, Inches	1/8	76	1/4
Thickness, Inches	.041	.041	.041
Per Pound	\$0.75	. 75	. 75

# HOOP IRON



Width, I	nches		34	1	1 34
Gauge .			20	20	20
	Pounds				Market
	Prices	on	Application.		

## FLAT STRIP BRASS



Catch Weight Bundles, No. 19 Gauge
Width, Inches. . ½ % ¾ % 1 1¼ 1½ 1¾ 2
Per Pound Market

# BESSEMER STEEL RODS

# ROUND BRASS RODS

#### Free Turning

Stock Lengths Vary from 8 to 12 ft. Base Price \$..... Per 100 Lbs.

Diameter, Inches 1/2 Weight Per Foot, Lbs045 Ad. Over Base, Per Lb \$0.041/2	.10	$.181$ $.02\frac{1}{2}$	. 282 . 0232
Diameter, Inches		, 55	
Diameter, Inches 5% Weight Per Foot, Lbs 1.13 Ad. Over Base, Per Pound	34 1.63	2.24	1 2.89 Base
Diameter, Inches	0.04	1.00	0.0-

# ROUND DRILL RODS

Crucible Steel, Po	lished,	In 1	and 3	ft. L	ength	s
Size, Inches 1 Per Pound \$0.50						
Size, Inches	\$0.55	½ .60	. 60	. 60	.75	% . <b>75</b>
Size, Inches	\$0.75	.75	. 75	¼ . <b>75</b>	11 .75	. <b>75</b>
Size, Inches	$\mathbf{so.75}^{kl}$	. 75	. 83	. 83	.83	.83
Size, Inches	\$0.90	1.05	<b>1.20</b>	${\overset{\stackrel{1}{16}}{\scriptstyle 1.45}}$	1.80	3.00

# BRAZED BRASS TUBING



No. 18 B. & S. Gauge (.0403)

12 ft. Lengths.

Outside Diam., Ad. Over Base,	Inches Per Lb	\$0.55	.25	.10	.04	.02	.01
Outside Diam	Inches	3/4	1	11/4	11/2	1 %	2

# SEAMLESS COPPER TUBING



Made of Annealed Seamless Copper. Can be bent in any direction without fear of breaking; very flexible.

Cut to Any Length

	10000	23	44.7	11
Outside Diameter, Inches	1/4	78	78	72
Inside Diameter, Inches		1/4	1,9	16
Feet Per Lb. Estimated Wt	12	9	7	4
Per Pound	80.68	. 65	. 63	. 62

# SLEEPER HOOKS



Used for fastening wood strips or sleepers to iron beams in building construction.

Nos	1830	2308
Length, Inches		3 %
Per Gross	\$1.20	1.30

Open Stock.

# WALL TIES WHALEBONE



#### Galvanized Sheet Steel

For	binding	two	courses	of	brick	or	fastening	brick	
veneer	walls to	the s	sheathing.						

No-			,						ï	,					×	,	•	٠	٠			. 1
Size,	Inches		i													r	,				ě	 % x7
Per	1000 .					٠					٠	-	,	-	ò		٠		٠	1	•	\$4.00



OOFING

# PREPARED ROOFING

RU-BER-OID SMOOTH

Tale Finish, Gray

The original ready-to-lay roofing. Cost more than ordinary prepared roofing but wears longer,

Veined surface with fine talc finish.

#### 36 in. Wide

Put up ready to lay, in rolls of 108 square feet. Will cover 100 square feet. Complete with large head sherardized nails, lap cement and directions for laying inside of roll. 8 square feet allowed for laps per square.

							Ron
Medium-Weig	ht P	er R	oll	45	Lbs	 .8	1.10
Heavy-Weight	Pe	r Ro	1 5	5 I	.bs.	 	1.90
Extra-Weight	Per	Roll	65	Lb	S	 . !	5.70

Note—Packed with Ru-ber-oid Lap Fasteners at 10¢ Per Square Extra.

#### STAREX SMOOTH

Tale Finish

Veined surface with fine talc finish.

#### 36 in. Wide

Put up ready to lay, in rolls of 108 square feet. Will cover 100 square feet. Complete with large head sherardized nails, lap cement and directions for laying inside of rol!. 8 square feet allowed for laps p≥r square.

	2020					Pe	r Roll
Light-	Weight	Per	Roll	35	Lbs		\$2.40
Medium	-Weigh	nt Pe	er Re	oll .	45 Lbs		2 90
Heavy-	-Weight	Per	Roll	55	Lbs.		3.40
	Desta						

Note—Packed with Ru-ber-oid Lap Fasteners at 34¢ Per Square Extra.



#### WIGWAM

#### Gray, Tale Finish

A good grade of smooth, veined surface roofing, suitable for all temporary structures and on some permanent ones of inexpensive construction.

#### 36 in. Wide

Put up ready to lay, in rolls of 108 square feet. Will cover 100 square feet. Complete with large head nails, lap cement and directions for laying inside of roll.

	Per	. ROII
Light-Weight Per Roll 35 Lbs	8	2.20
Medium-Weight Per Roll 45 Lbs		2.60
Heavy-Weight Per Roll 55 Lbs		3.10





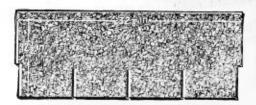
#### 36 In. Wide

#### SHINGLES

#### SQUARE-TAB STRIP SHINGLES

#### RU-BER-OID

Designed for those who prefer the effect resulting from individual shingles at a saving of 50 per cent in labor and nails, resulting from laying four shingles at a time.



#### Slate Surfaced

12 1/2 in. Wide, 36 in. Long.



#### Slate Surfaced

10 in. Wide, 36 in. Long.

 100 Strips Per Square, Each Strip 10x36 in., Composed of 4 Square Tabs.
 Per Square

 No. 10G—Green, 2 Bundles to a Square.
 \$10.00

 No. 10R—Red, 2 Bundles to a Square.
 10.00

 No. 10B—Steel Blue, 2 Bundles to a Square.
 10.00

Weight Per Square 185 to 195 Pounds.

Ruberoid Square Tab Strip Shingles are made from the same high grade felt, saturant and coating that have proven the best in Ruberoid Roof Coverings.

## RED SHEATHING



#### 36 in, Wide

# TARRED SLATERS FELT



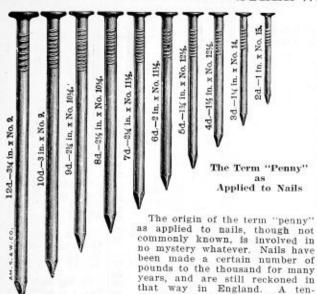
36 in. Wide

500 Square Feet in a Roll.

Felt Saturated with Coal Tar, No Fixtures.

Per 100 Lbs.
No. 30SF—About 30 Lbs. Per Roll......Market

# STEEL WIRE NAILS



penny being a thousand nails to 10 pounds; a six-penny a thousand nails to six pounds; a twenty penny weighing twenty pounds to the thousand, and, in ordering, buyers call for the three-pound, six-pound and ten-pound variety, etc., until by the Englishman's abbreviation of "pun" for "pound," it has been made to stand for penny, instead of pound, as originally intended.

### BRIGHT COMMON

Size	Length Inches	Gauge Number	Average No. to Lb.	Advance Over Base
2d	1	15	876	\$1.45
34	1 1/4	14	568	1.15
4d	1 1/2	12 1/2	316	.80
5d	1 34	121/2	271	.75
6d	2	111%	181	.60
7d	2 1/4	111/2	161	. 55
8d	2 1/2	1034	106	.30
9d	2 %	101/4	96	. 30
10d	3	9	69	.20
12d	3 1/4	9	63	.15
16d	3 1/2	9	49	. 10
204	4	6	31	Base
30d	4 1/2	5	24	Base
40d	5	4	18	Base
50đ	5 1/2	3	14	Base
604	6	2	11	Base

One Hundred Pounds in a Keg.

#### GALVANIZED COMMON



Size	Length Inches	Gauge Number	Approx. No. to Lb.	Advance Over Base
4d	1 1/2	121/2	316	8
5d	1 %	121/2	271	
6d	2	111/2	181	
7d	2 1/4	111/2	161	
8d	2 1/2	1034	106	
9d	2 34	101/4	96	
10d	3	9	69	
20d	4	6	31	

One Hundred Pounds in a Keg.

### SMOOTH BOX AND SIDING

Size	Length Inches	Gauge Number	No. to Lb.	Advance Over Base
2d	1	15 1/2	1010	\$1.65
3d	1 1/4	1 4 1/2	635	1.30
4d	1 1/2	14	473	1.05
5d	1 %	14	406	1.00
6d	2	1236	236	.70
7d	2 14	12 1/4	210	.65
8d	2 1/2	11 1/2	145	.45
9d	2 34	11 1/6	132	. 45
10d	3	10 1/2	94	.30
12d	3 1/4	10 1/2	88	.25
16d	3 1/2	10	71	. 15
20d	4	9	52	.05

#### FENCE

				-	
Size	Length Inches	Gauge No.	Diam. Head, In.	Av. No. to Lb.	Advance Over Base
5d	1 3/4	10	1/2	142	80.50
6d	- 2	10	32	124	. 45
7d	2 1/4	9	18	92	. 35
8d	2 1/2	9	y's	82	. 25
9d	2 34	8	31	6.2	.25
10d	3	7	3%	5.0	.20

#### FLOORING BRADS

# ann S

#### 32 Degree Countersunk

Size	Length Inches	Gauge No.	Diam. Head. In.	Av. No. to Lb.	Advance Over Base
6d	2	11	6	157	80.55
7d	2 1/4	11	6	139	.50
8d	2 1/2	10	5	99	.35
9d	2 3/4	10	5	9.0	.35
10d	3	9	4	69	.25

#### CASING

#### 32 Degree Countersunk

Size	Length   Inches	Gauge No.	Diam. Head, In.	Av. No.	Advance Over Base
2d	1	15 1/2	12 1/2	1010	\$1.70
3d	1 1/4	14 1/2	11 1/2	635	1.35
4d	1 1/2	14	11	473	1.10
5d	1 %	14	11	406	1.05
6d	2	121/2	9 1/2	236	.75
7d	2 1/4	12 1/2	9 1/2	210	. 70
8d	2 1/2	11 1/2	8 1/2	145	. 50
9d	2 34	111/2	8 1/2	132	. 50
104	3	10%	7 1/2	91	. 35
12d	3 14	10 1/2	7 1/2	87	. 30
16d	3 1/2	10	7	71	. 20

#### \*FINISHING

# \_\_\_\_\_0

Size	Length Inches	Gauge No.	Diam. Head, In-	Av. No. to Lb.	Advance Over Base
2d	1	16 1/2	131/2	1351	\$2.00
3d	1 1/4	15 1/2	12 1/2	807	1.55
4d	1 1/2	15	12	584	1.25
5d	1%	15	12	500	1.20
6d	2	13	10	309	1.00
74	2 1/4	13	10	238	.70
8d	2 1/2	12 1/2	9 1/2	189	. 60
9d	2 3/4	12 1/2	9 1/2	172	.60
10d	3	111/2	8 1/2	121	. 45
12d	3 1/4	111/4	8 1/2	113	.40
16d	3 1/2	11	8	9.0	.25
20d	4	10	7	62	.15

All Above, One Hundred Pounds in a Keg.
\*Finishing Nails—Sizes 2d to 10d are also carried in stock
in 25 lb. Boxes. Prices on Application.

# STEEL WIRE NAILS AND BRADS



In Ordering Specify Whether Brad Heads or Flat Heads are Wanted

Cut to Left Shows Flat Head Wire Nails.

In 1 Pound Boxes

List Prices Per Pound.

& Inch	14 Inch	34 Inch	1 Inch	1 1/2 and 1 5/8 Inch	2½ Inch
No. 20 \$1.80	No. 14 \$0.55	No. 1080.36	Nos. 7 to 12.80.30	Nos. 4 to 13, 50.29	NOS. 5 (0 10.00.20
No. 21 2.00	No. 1555		No. 13	No. 14 30	No. 11
No. 22 2.20	No. 1655	No. 1236	No. 1432	No. 1531	
No. 23 2.40	No. 17 60	No. 1338	No. 1533		No. 1328
No. 24 2.55	No. 1865	No. 1438	No. 1636	No. 1738	
	No. 1975	No. 1542	No. 1740	1 34 Inch	2¾ Inch
14 Inch	No. 20 85	No. 1643	No. 1843	1¾ Inch Nos. 4 to 13, \$0.28	Nos. 3 to 10.80.26
No. 19\$1.00	No. 21 1.00	No. 1746	No. 1953	No. 1429	
No. 20 1 . 25	No. 22 1.25			No. 1530	No. 1227
No. 21 1.55			11/8 Inch	No. 1632	3 Inch
No. 22 1.90	No. 24 1.90	No. 2070	Mag 7 to 19 80 90	No. 1738	Nos. 3 to 10 . \$0 . 25
No. 23 2.15		No. 2185	No. 1331	2 Inch	No. 11 26
No. 24 2.35	% Inch	38 Inch	No. 14 99	Nos. 3 to 10.80.27	No. 1227
No. 25 2.53			No. 1532	No. 1128	No. 12
No. 26 3.10	No. 1343	No. 933	No. 1635	No. 12 28	3¼ Inch
	No. 1443	No. 10	No. 1740	No. 1328	Nos. 3 to 10.80.25
	No. 1545	No. 1133 No. 1233	No. 1843	No. 1429	No. 11 26
No. 18\$0.80			No. 1953		No. 1227
No. 1990	No. 1752 No. 1858	No. 1334 No. 1435	134 and 136 Inch		3½ Inch
No. 20 1.00			Nos. 6 to 12. 80.29		3 ½ Inch
No. 21 1.25 No. 22 1.55			No. 13 30		Nos. 3 to 10.80.25
No. 23 1.95			No. 1431	No. 1128	No. 1126
No. 24 2.15			No. 1532	No. 1228	4 Inch
No. 25 2.40					Nos. 3 to 10.80.25
	No. 24 1.65		No. 1739		No. 1126

# LIST OF EXTRAS AND DEDUCTIONS FROM LIST PRICES ON MISCELLANEOUS NAILS

Add to list 10 cents per pound for cement coating. Add to list 6 cents per pound for 1/2 lb. Paper Boxes. Add to list 12 cents per pound for 14 lb. Paper Boxes. 3 cents per pound for barbing. Add to list Add to list 3 cents per pound for annealing. Add to list 3 cents per pound for bluing. 3 cents per pound for Spec. Heads or Head-Add to list

less. Add to list 3 cents per pound for Needle Points or Any Special Points.

Deduction for 100-pound Kegs, 4 cents per pound. Deduction for 25 and 50-pound Boxes, 2 cents per pound. For lengths not listed, use list price for same gauge in nearest shorter length.

For nails, finer than full gauge, apply list price of same length in next finer gauge.

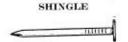
Nails heavier than listed, at special net prices, according to quantity.

Galvanizing, tinning, brass plating, coppering nails, at special prices.

#### Wire Brads and Flat Head Wire Nails in 1/4 Pound Papers

Length, Inches .. 18-19-20 17-18-19-20 18-19-20 18-19-20 16 - 1714-15-16 Nos. . . . . . . . . . 18-20 16-17-18 14-15-16

# STEEL WIRE NAILS



#### Galvanized

Size 3d	4d
Length, Inches 1 1/4	1 1/2
Gauge Nos	12
Diameter Head, Inches	14
Approximate Number to Pound 429	274
Advance Over Base Price \$	

#### FINE



· Size	Length, Inches	Gauge Numbers	Average No. to Lb.	Advance Over Base
3d	1 1/8	15	778	\$1.60
3d, Extra	1 1/8	16	1015	1.80

One Hundred Pounds in a Keg.

#### STERILIZED BLUED LATH

***************************************	
Size 3	d 3d Light
Length, Inches 1	% 1 ½
Gauge Nos	5 16
Average Number to Pound 77	8 1015
Advance Over Base \$1.	85 2.05

Lathers carry the nails in the mouth while at work and it is therefore, from the standpoint of health sanitation, necessary to have the nails free from injurious substances.

#### SLATING

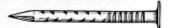


Size Length,		Gauge	Av. No.	Advance		)1	76	r		В	a.	se	4	
Inches	Numbers	to Pound	Plain	T			1	G	a	lv	7.			
2d	1	12	411	\$1.20	1.									
3d	1 34	10 1/2	225	.95	1.						,			
4d	1 1/2	10 1/2	187	.85										
5d	1 %	10	142	.75										
6d	2	9	103	. 65										

One Hundred Pounds in a Keg.

# ROOFING NAILS

STANDARD BARBED ROOFING



Regular Head, Bright

Size	Length, Inches	Gauge Nos.	Av. No. to Lb.	Advance Over Base
34	3/4	13	714	81.55
76	7/8	12	469	1.30
1	1	12	411	1.20
1 1/6	1 1/8	12	365	1.10
1 34	1 1/4	11	251	. 95
1 %	1 3/8	11	230	.90
1 14	1 1/2	10	176	.80
1 34	1 3/4	10	151	.75
2	2	9	103	.65

#### Regular Head, Galvanized

76	76 1	12 12	469 411	
----	---------	----------	------------	--

#### LARGE HEAD BARBED ROOFING



#### Flat Head

#### 12 in. Head, No. 8 Gauge

Length, Inches				36	1	136
Av. No. to Lb			205	179	158	142
Bright-Advance				1.55	1.45	1.40
Galvanized—Adv	ance Ove	r Base				
Length, Inches			errer.	1 34	1 36	1 94
Av. No. to Lb				128	108	93
Bright-Advance	Over E	ase		\$1.35	1.30	1.25
Galvanized-Adv	ance Ove	er Base	2			
On	e Hundre	ed Pou	nds in	a Keg.		

# IDEAL BARBED ROOFING



Sealing ring under the head makes a watertight joint and provides a firm grip against wind pressure. Checkered head prevents slipping of the hammer. The long sharp point makes it easy to stick nall in place.



#### Copper Steel, 32 in. Diameter Head Bright Finish or Hot Galvanized (Zinc Coated)

Length. Inches	76	1
Wire Gauge, Nos	11	11
No in a Pound	210	195
Bright—Per 100 Lbs	\$ 8.00	7.50
Hot Galvanized-Per 100 Lbs	11.00	10.50
One Hundred Pounds in a l	Keg.	

#### SIMPLEX



Shank extends through the head. Hammer does not glance as the blow falls directly on the head of the nail shank, not on the curved dome.

Four times the head area of large headed nails. One-piece, head cannot loosen.

#### Thickness No. 12 Gauge.

				Ē	Per 10	00 Pounds
Length 1 Inch	-Diameter	Head 1	in.,	115	Nails	to
	50 and 1	00 Poun	d Ke	gs.		

# TIN ROOFING CAPS



#### Heavy, with Nail Holes

				Per Pound
No.	1-11/4	in.	Diameter	\$0 . 12

#### STEEL WIRE SPIKES

FLAT HEAD, DIAMOND POINT



Length, Inches	7	8	9	10	12
Thickness, Inches	de	3%	36	36	3/8
Approx. Number to Pound	7	4	3 1/2	3	2 1/2
Advance Over Base	\$0.10	. 10	.10	.25	.25

One Hundred Pounds in a Keg.

#### HINGE NAILS

WIRE, DIAMOND POINT



Countersunk Head.



Oval Head.

Note—In Ordering Hinge Nails Specify whether Oval or Countersunk Head, Light or Heavy Annealed or Bright.

#### LIGHT HINGE, BRIGHT

Size	4d	6d	8d	10d	12d	16d	20d
Length, Inches	1 1/2	2	2 1/2	3	3 14	3 1/2	4
Gauge Nos	16	16	20		14		1/4
Diameter Head, In	3.8	13	12	1/2	1/2	1/2	1/2
Degree Countersunk		9.5	9.5	95	95	95	95
Average No. to a Lb	82	6.2	50	25	23	22	19
Advance Over Base	\$1.00	.90	. 75	.65	.60	. 55	.50

Annealed Nails \$0.25 per 100 Pounds Advance.

#### HEAVY HINGE, BRIGHT

Size	4d	6d	8d	10d	12d	16d	20d
Length, Inches	1 1/2	2	2 1/2	3	3 14	3 1/2	4
Gauge Nos		1/4	1/4	36	3/8		3/8
Diameter Head, In	1/2	16	1/2	34	3/4	3/4	34
Degree Countersunk		9.5	95	95	95	9.5	95
Average No. to a Lb	50	38	30	12	11	10	9
Advance Over Base		.85	.70	.65	.60	.55	.50

Annealed Nails \$0.25 per 100 Pounds Advance.

# CEMENT COATED WIRE NAILS

Base Price......Market SINKERS

The best all-around nails made for either hand or machine driving. For use in all styles of wooden shipping packages and for all the every-day uses of nails. Heads cannot break or pull off. Size 3d 4d 6d 8d10d Length, Inches..... 1 1/8 1% 1 % 2 3% 2 34 Gauge Nos. . . . . . . . 15 1/2 14 13 111% 11 No. of Nails in Pound. 848 488 275 142 104 Advance Over Base. Per 100 Lbs..... \$1.90 1.55 1.15 .75 . 65 EGG CASE

AAGMAA

Undoubtedly the only perfect nails for egg cases. dorsed by carriers and have every feature desirable for the use intended

dse intended.		
Size	3d	4d
Length, Inches	1 1/8	1 1/2
Gauge Nos	15	14
Number of Nails in Pound	738	435
Advance Over Base, Per 100 Lbs	82.15	1.80

# STEEL CUT NAILS

Base Price . . . . . . . Market

SHINGLE

	- 5				_	_	e in	_	_		_	_				_	_	8	ц	1							
Size								3															÷		2	4	d
Length, Inches	8																							_		11	14
Advance Over																											80
(	One	H	lu	n	di	re	d		P	01	at	10	is	;	i	n	8	i	K	e	g						

FLOORING

																-10	
Size			-00		-	000											8d
Length,	Inches													6			2 1/2
Advance	Over	Base						1.									\$0.60
	C	ne H	und	re	d	Po	n	nd	s	in	a	F	Leg				10000

CLINCH

Size         4d           Length, Inches         1½           Approximate No. to Lb         180           Advance Over Base         \$1,2	140	6d 2 95 1.00	7d 2 ¼ 74 . 95
Size Length, Inches Approximate No. to Lb. Advance Over Base One Hundred P.	8d 2 ½ 62 80 .80	9d 2 % 5 3 . 80	10d 3 46 . 70

# COPPER WIRE NAILS

5	Pound	Boxes			
Size	2d	3d	4d	5d	6d
Length, Inches	1	1 14	1 3/2	1.34	2
Per Pound	80.40	.40	.40	.40	. 40
Size		Sd	10d	16d	20d
Length, Inches		2 1/2	3	3 1/6	4
Per Pound		80.40	.40	.40	40

# COPPER SLATING NAILS



	Large	Heads,	5 Pound	Boxes	
Size				3d	4d
Length, Inches			1	1 1/4	1 1/6
Per Pound			80.40	.40	. 40

# BARBED DOWEL PINS



No. 8 Gauge

Length, Inches 5%	34	76	1	1 36
Average No. in Pound. 290	250	210	190	165
Advance Over Base \$1.75	5 1.50	1.35	1.25	1.15
Length, Inches	. 134	1 3%	1 36	1%
Average No. in Pound	. 150	130	120	
Advance Over Base	. \$1.10	1.05	1.00	.90
No. 11	Gauge			
Length, Inches		34		1
Average Number in Pound		480		349
Advance Over Page		21 0	n.	1 0*

# One Hundred Pounds in a Keg. HOOP NAILS OR FASTENERS

FLANGE



Per Pound No. 2-10 1/2 Gauge, 1/2 in. Long, 308 to a Lb..... \$0.11 One Hundred Pounds in a Keg.

# HORSESHOE NAILS

LEADER

Best American Stock, Well Formed, Medium Quality.



No. 7

City	Head		
Nos	7	8	9
Length, Inches		2.37	2.58
Per Pound	\$0.28	1.22	.21 %
Five Pounds	in a Pack	age.	

# MASONRY NAILS

PARKER-KALON HARDENED



The only nail expressly designed for making fastenings to brick, mortar, concrete, etc.

They offer a simple, inexpensive yet thoroughsatisfactory means of making fastenings to all kinds of masonry.

Will be found easier, quicker and cheaper to use than expansion bolts, lead anchors and plugs, hooks, spikes and other devices now being used.

Used by Sheet Metal Workers, Carpenters, Electricians, Plumbers, Sign Hangers, etc.

Simply necessary to hammer the nail into the brick, concrete or masonry-a drill is necessary only if material is unusually hard and tough.

Electro Galvanized Finish Size, Inches ..... & x1 14 x 1 1/2 14 x2 Per Box of 100 ... \$0.90 2.00 1.65 One Hundred in a Box.

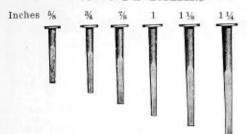
#### MASONRY DRILL PUNCH

OLON MASONRY TRILL PUNCH

Especially designed for making holes in brick, mortar, etc., where it is necessary, in order to start Hardened Masonry Nails.

Size, Inches ..... Each ..... \$0.60 60

# CLOUT NAILS



# 1 Lb. Packages

I	31	u	e	ť	ı

Length, Inches	\$0.39	.38	.36	.35
Length, Inches Per Pound	\$0.34	1 ¼ . 33	$\frac{1\frac{1}{2}}{32}$	.30

## TRUNK NAILS

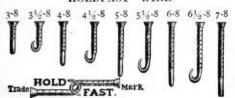


1 Lb. Packages

#### Tinned

Length, Inches	\$0.41	% .40	.39	.39
Length, Inches	1 80 37	1 14	1 1/2	2 .35

# SHOE NAILS



The only nail made with that peculiar oval, awl shaped, clinching point, which turns back into the insole, making a secure fastening.

#### No. 16 Bright Wire

	1	Lb. P	ackage.			
Length, Inches		(Sizes	Shown	Above	Cut),	36 to 76
Per Pound						80.34

# AMERICAN CUT TACKS

1	172	2	21/2	3	4	6	8
T	T	T	T	T	1		

	Blued,	14 Lb.	Papers			
	Papers		1 1/2	1.05	2 1/2	.80
Total Dozen		14 Lb.				

 Size Nos.
 4
 6
 8

 Per Dozen Papers
 \$1.40
 1.35
 1.30

 One Dozen Papers in a Package.
 1.30
 1.30

# AMERICAN CARPET TACKS

# Flat Head, Blued

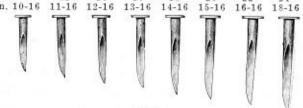
223				1707 1.3	apers			
Size	Nos.		4	6	8	10	12	14
Per	Doz.	Papers.	\$1.33	1.27	1.25	1.20	1.20	1.15
		One	Dozen	Papers	in a I	Package.		
			1,4	6 Lb. Pr	aners			

			72 1	co. rapers			
Size	Nos			10	12	14	16
Per	Pound	****		80.37	. 36	.35	.35
		One	Dozen Pa	apers in a	Package.	10000000	
				Lb. Boxes			

Size Nos. . . . . 4 6 8 10 12 14 Per 100 Lbs. . \$39.10 37.30 35.60 35.05 33.90 33.35

# SWEDES UPHOLSTERERS TACKS

Nos. 1 In. 3-16	$\frac{1\frac{1}{2}}{3\frac{1}{2}-16}$	$^{2}_{4-16}$	$\begin{smallmatrix}2&3_2\\5-1&6\end{smallmatrix}$	$^{3}_{6-16}$	$\frac{4}{7-16}$	6 8-16	8 9-16
T	T	T	W	T	I	H	
	4	d	U	0	No.	G.	
Nos. 10	12	14	16	18	20	22	24
In. 10-16	11-16	12-16	13-16	14-16	15-16	16-16	18-16
-	No.	-	-			Name of	-



		Blu	ed			
		½ Lb.				
Size	Nos	1	11%	2	2 14	3
Per	Dozen	Papers \$1.23	5 1.10	1.05	. 95	.80
		14 Lb.	Papers			

 ½ Lb. Papers

 Size Nos.
 10
 12
 14
 16
 18
 20

 Per Pound
 \$0.37
 .36
 .35
 .35
 .35
 .35

 Above, One Dozen Papers in a Package.

 25 Lb. Boxes

 Size Nos.
 2
 2½
 3
 4
 6

 Per 100 Pounds.
 \$58.20
 54.05
 44.20
 41.70
 39.40

 Size Nos.
 8
 10
 12
 14

 Per 100 Pounds.
 \$37.15
 35.60
 33.90
 33.35

# RAILROAD OR BILL POSTERS TACKS



 25 Lb. Boxes

 Nos.
 2 ½
 3
 4
 6

 Per 100 Pounds
 \$44.85
 42.35
 39.60
 37.20

 Nos.
 8
 10
 12

 Per 100 Pounds
 \$36.90
 36.60
 36.25

# GIMP TACKS

Nos. 2 1/2

#### Blued

Lb. Paper	
	PS.

Size, Nos	1	1 16	2	3	4
Length, Inches	7/32	4/16	5/16	7/16	8/16
Per Dozen Papers	81.25	1.20	1.10	. 90	. 85

14 Lb. Papers			
Size, Nos	4	6	8
Length, Inches	8/16	9/16	10/16
Per Dozen Papers	\$1.50	1.30	1.30
One Dozen Papers in a Pa	ackage.		

### COPPER TACKS

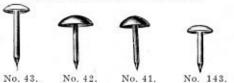


Cut

#### Flat Head, in 1 Lb, Papers

Size, Nos	2	2 1/2	3	4	6
Length, Inches	4/16	5/16	6/16	7/16	8/16
Per Pound	\$0.70	. 65	. 60	. 60	. 60
Size, Nos	9	10	14	18	22
Length, Inches	9/16	10/16	12/16	14/16	1
Per Pound	\$0.60	. 60	.60	. 60	. 60

# UPHOLSTERY NAILS



#### Brass, Gilt Finish

Nos		42	41
In Boxes of 50 Per 1000,		.95	1.15
In Boxes of 100 Per 1000,	.70	. 90	1.10
In Boxes of 1000 Per 1000,	.60	.80	1.00

Shank f inch. Per 1000 No. 143-In Boxes of 1000..... ....\$0.60

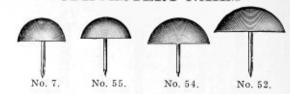


#### Brass

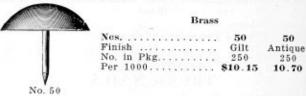
000	1	Rover	In
	1	Boxes	In

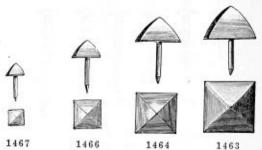
Nos	3	3	9	9	19 16	19 16
Shank, In	1/2	1/2	1/2	3/4	1/2	1/2
Finish	Gilt	Nickel	Gilt	Nickel	Gilt	Nick ol
Per 1000	\$1.50	1.90	1.50	1.75	.65	. 85

# UPHOLSTERY NAILS

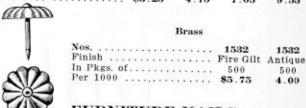


			Mass				
Nos	7	7					52
Finish	Gilt	Nickel	Gilt	Ant.	Gilt	Ant.	Nickel
No. in Pkg	1000	1000	1000	1000	500	500	500
Per 1000							





	Brass			
Nos			1464	1463
Finish	Fire Gilt	Fire Gilt	Natural	Natural
No. in Package	1000	1000	500	250
Per 1000	\$3.25	4.75	7.05	9.55



### FURNITURE NAILS METALENE

These nails have a broad seat at the base of head which prevents sharp edge from cut-

ting the gimp. No. 220

Color Nos.... 3 7 14 Color ..... Maroon Tan Green Red Per 1000 . . . . \$1.95 1.95 1.95 1.95

# No. 220

# PUSH THUMB TACKS MOORE







Nickeled Steel

					40.00		a steel
1550							Per Dozen Blocks
No.	51-%	in.,	12	Tacks	to	a	Block
No.	52 - 7	in.,	10	Tacks	to	a	Block
No.	53-1/2	in.,	8	Tacks	to	a	Block
No.	54-%	in.,	6	Tacks	to	a	Block
							ks to a Carton.

# FENCE STAPLES



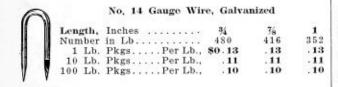
#### Galvanized, No. 9 Wire

Size, Inches	1	1 1/8	1 34	1 1/2
Number in Lb	108	96	8.7	72
Per Pound	\$0.07	.07	.07	.07

100 Pounds in a Keg.

1¼ Inch.

# POULTRY NETTING STAPLES



## WROUGHT STAPLES



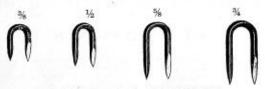
#### No. 976-Wrought Steel, Bright

Size, Inches	1	$1\frac{1}{20}$ $1\frac{1}{20}$ $1.25$	1¾ 1% 1.50	2 2 1/3 1.70
Size, Inches	3 14	$2\frac{14}{4\frac{1}{2}}$ $2.35$		3 6 3.20
Size, Inches	\$3.70	5.25	6.50	8.00
2% in. and Smaller, One (	Fross; Othe Box.	ers, On	e-haii (	FOSS

No. 105-Extra Heavy, Wrought Steel, Bright

Size, Inches		6 1/4	5 10
Per 100	\$2.40	5.40	7.40
2 1/2 in., One Hundred;	Others,	Fifty in a Box.	

# ELECTRICIANS STAPLES



No. 65-Coppered, Round Crown

Sharp Pointed Flat Steel Wire.

Size, Inches....... 36 34 58 34 78 Per 100 Pounds...... \$42.70 41.50 39.65 37.55 37.05 Ten Pounds in a Box.

Note—Can also be furnished in 1 pound packages at \$1.00 per 100 lbs. net additional.

# INSULATED STAPLES

BLAKE FIBRE



Designed for use on all low voltage circuits of interior wiring, such as telephones, telegraph, messenger call, annunciator, etc.

The fibre insulation of these staples cannot come off in driving.

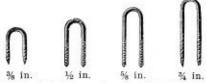
# One Hundred in a Package. WIRE CLINCH STAPLES

No. 15-Coppered, Round Crown

Sharp Pointed Flat Steel Wire.

Size, Inches... \$\frac{34}{2}\$ 1 1\frac{14}{2}\$ 1\frac{14}{2}\$ 2
Per 100 Lbs. \$\frac{30.85}{30.85}\$ 30.35 29.85 29.35 27.85
Ten Pounds in a Box.

#### BLIND STAPLES



No. 25-18 Gauge, Copper Plated, Barbed

Length, Inches...... 3% 3½ 5% 3½ Per 100 Pounds..... \$49.00 46.80 46.05 44.65 Ten Pounds in a Box.

#### BARREL OR HOOP STAPLES



No. 61-Sharp Pointed, Flat Steel Wire, Coppered

## DOUBLE POINTED TACKS



1/8 Pound Papers

Nos	9	10	11	12
Width, Inches	3/2	1/4	22	75
Length, Inches	76	3.3	1/2	5/8
Gauge Nos	16	16	15	15
Tinned Per Doz. Papers,	\$0.75	. 70	. 70	. 70

Our Stock of Nails, Tacks, Staples, Screws, Bolts and Nut is complete enough to take care of your requirements.

# BOX OR CASKET STAPLES



No. 62-Sharp Pointed Flat Steel Wire, Coppered

 Size, Inches
 1x34
 134x76
 134x76

 Per 100 Pounds
 \$36.85
 35.35
 33.35

 Ten Pounds in a Box
 33.35

# FLEXIBLE CLASPS STANLEY STEEL



Used to securely fasten covers on pails, tubs, buckets, baskets, etc., and to reinforce light crates and boxes. Easily applied and have great holding power.

#### Steel Wire, Cement Coated

# CORRUGATED JOINT FASTENERS WROUGHT STEEL





No. 3306

No. 3306—Plain Edge, Divergent No. 3320—Saw Edge, Divergent

Depth, Inches No. Corrug's		1000 %	, Boxe 32		34	78	1
2	80.45	.55	.60	.80	. 90	1.00	1.15
3	.60	.75	.85	1.00	1.15	1.35	1.45
4	.75	.95	1.05	1.30	1.45	1.75	1.85
5	.90	1.20	1.30	1.70	1.85	2.20	2.40
6	1.10	1.40	1.50	1.85	2.15	2.55	2.85

7 1.30 1.60 1.80 2.20 2.50 3.00 3.35 Note—In ordering specify Style Number as well as Depth and Number of Corrugations,

## BOX STRAPPING ACME DOT EMBOSSED

STITE COLD SECTION

The safe arrival of merchandise is insured through the application of the proper type of box straps. It also prevents pilferage, insures package security and reduction in the thickness of container material.



Put up in coils of 300 feet which make handling Acme Box Strapping a convenience and a pleasure.

#### Flexizle Cold Rolled Steel, Lacquered 300 Foot Coils

Width, Inches	36	56	34	76	1
Coils in Case		2.0	20	10	1.0
Per Coil	\$1.00	1.25	1.50	1.75	2.00

# BRASS ESCUTCHEON PINS



List of April 12, 1923. Price Per Pound

Wire Ga. No.	Length, Inches										
B.W.G.	34	36	16	96	34	1 18					
10		\$0.85	\$0.80	\$0.78	\$0.76	\$0.75					
12	\$1.15	.98	.93	.90	.87	. 85					
14	1.25	1.05	1.00	. 96	.92	.88					
15	1.35	1.15	1.07	1.00	.95	.92					
16	1.45	1.20	1.10	1.03	.99	. 96					
17	1.60	1.40	1.25	1.17	1.10	1.04					
18	1.90	1.50	1.35	1.27	1.20	1.15					
19	2.15	1.75	1.60	1.45	1.35	1.30					
20	2.35	2.10	1.95	1.80	1.65						

Wire Ga. No.		Lei	ngth, Inc	hes	
B. W. G.	1	11/4	1 1/2	1 %	2
10	\$0.74	\$0.72	\$0.71	\$0.70	\$0.69
12	. 83	.79	.77	.76	.75
14	. 85	.81	.80		
15	.90	.86	.84		
16	. 94	.90	.88		
17	1.00	.96	.94		
18	1.10				
19	1.25				

One Pound in a Box.

#### Number of Brass Escutcheon Pins in a Pound

Wire Ga. No.	Length, Inches										
B.W.G.	96	1 36	96	34	76	1	114	11/2			
12	720	650	460	416	400	336	272	212			
14	1312	1100	950	830	692	600	432	378			
15	1820	1376	1152	960	888	720	576	580			
16	2240	1720	1460	1275	1130	980	720	592			
17	2700	2076	1812	1500	1185	1051	928	800			
18	3175	2550	2450	2200	1740	1520	1216	960			
19	5140	4130	3565	2900							
20	8419	6374	5500	4155							

# CURTAIN PINS

#### Headless, Brass

1 P	ound Pa	ckages		
Wire Nos	15	16	15	16
Length, Inches	1	1	1 14	1 14
Per Pound	80.90	. 90	. 90	.90

# GLAZIER POINTS



.80

# MACHINE BOLTS

U. S. THREAD



With Square Heads and Square Nuts. Finished Points

Manufacturers' Standard List Effective September 1, 1923.

#### Price Per Hundred

Lgth.		Diameter, Inches.							
In.	1/4	TG	38	1/2	5%	3/4	7/8	1	
1 1/2	\$1.70	2.00	2.40	3.70	5.50	7.70	10.50	15.10	
2	1.80	2.15	2.60	4.00	5.90	8.25	11.20	16.00	
216	1.90	2.30	2 - 80	4.30	6.30			16,90	
3	2.00	2.45	3.00	4.60	6.70		12.60		
314	2.10	2.60	3.20	4.90	7.10	9.90	13.30	18.70	
4	2.20	2.75	3.40	5.20	7.50	10.45	14.00	19.60	
4 1/2	2.30	2.90	3.60	5.50		11.00			
5	2.40	3.05	3.80	5.80		11.55			
5 1/2	2.50	3.20	4.00	6.10	8.70		16.10	22.30	
6	2.60	3.35	4.20	6.40			16.80	23.20	
614	3.70	4.50	5.40	7.70	9.50				
7	3.80	4.65	5.60	8.00		13.75	18.20	25.00	
7 1/2	3.90	4.80	5.80			14.30	18.90	25.90	
8	4.00	4.95	6.00		10.70		19.60	26.80	
9	4.20	5.25	6.40		11.50		21.00	28.60	
10	4.40	5.55	6.80		12.30			30.40	
11	4.60	5.85	7.20					32.26	
12	4.80	6.15	7.60			19.25		34.00	
13			8.00		14.70		26.60	35.80	
14			8.40			21.45			
15			8.80	12.80			29.40		
16			9.20		17.10				
17					17.90				
18					18.70				
19					19.50				
20				15.80	20.30	28.05			
21							37.80		
22						30.25		52.00	
23							40.60		
24						32.45	42.00	55.60	

# BRASS MACHINE BOLTS

HEX HEADS AND HEX NUTS

Price Per Hundred

Lgth	1	Diameter of Bolt, Inches									
In.	1/4	र्नेट	3/8	10	1/2	98	3/4				
2	\$ 9.80	12.00	14.20	17.70	20.40	28.20	41.80				
214			15.00	18.90	21.90	30.40	45.00				
3			15.90	20.00	23.30	32.60	48.20				
3 14			16.70	21.10	24.80	34.70	51.40				
4			17.50	22.20	26.20	37.00	54.50				
416			18.20	23.40	27.70	39.00	57.60				
5			19.20	24.50	29.20	41.30	60.80				
516			20.00	25.60	30.70	43.80	64.00				
6			20.80	26.80	32.10	45.60	67.20				

# CARRIAGE BOLTS

U. S. THREADS



Oval Heads, Hot Pressed Nuts

Standard List Effective September 1, 1923.

#### Price Per Hundred

Lgth.,	1		Diamete	r, Inche	8		
In.	1 & 14	136	3/8	7	1/2	Po & %	34
1	\$1.00	1.40	1.90	2.50			
1 1/2	1.00	1.40	1.90	2.50			
2	1.10	1.55	2.10	2.75			
21/2	1.20	1.70	2.30	3.00	3.25	6.00	9.8
3	1.30	1.85	2.50	3.25	3.55	6.40	10.3
3 1/2	1.40	2.00	2.70	3.50	3.85	6.80	10.8
4	1.50	2.15	2.90	3.75	4.15	7.20	11.3
4 1/2	1.60	2.30	3.10	4.00	4.45	7.60	11.8
5	1.70	2.45	3.30	4.25	4.75	8.00	12.3
5 1/2	1.80	2.60	3.50	4.50	5.05	8.40	12.8
6	1.90	2.75	3.70	4.75	5.35	8.80	13.3
6 1/2	2.75	3.65	4.65	5.75	6.40	9.20	13.8
7	2.85	3.80	4.85	6.00	6.70	9.60	14.3
7 1/2	2.95	3.95	5.05	6.25	7.00	10.00	14.8
8	3.05	4.10	5.20	6.50	7.30	10.40	15.3
81/2	3.15	4.25	5.45	6.75	7.60	10.80	15.8
9	3.25	4.40	5.65	7.00	7.90	11.20	16.3
9 1/2	3.35	4.55	5.85	7.25	8.20	11.60	16.8
10	3.45	4.70	6.05	7.50	8.50	12.00	17.3
11	3.65	5.00	6.45	8.00	9.10	12.80	18.3
12	3.85	5.30	6.85	8.50	9.70	13.60	19.3
13	4.05	5.60	7.25	9.00	10.30	14.40	20.3
14	4.25	5.90	7.65	9.50	10.90	15.20	21.3
15	4.45	6.20	8.05	10.00	11.50	16.00	22.3
16	4.65	6.50	8.45	10.50	12.10	16.80	23.3
17	4.85	6.80	8.85	11.00	12.70	17.60	24.3
18	5.05	7.10	9.25	11.50	13.30	18.40	25.3
19	5.25	7.40	9.65	12.00	13.90	19.20	26.3
20	5.45	7.70	10.05	12.50	14.50	20.00	27.3

# BRASS CARRIAGE BOLTS

WITH HEX NUTS

Price Per Hundred

Length.	Diameter of Bolt, Inches.								
Inches	1/4	Ya I	3/8	Te I	1/2				
2	\$ 9.60	11.80	14.00	17.40	20,00				
2 1/2	10.00	12.40	14.80	18.50	21.50				
3	10.50	13.00	15.60	19.60	22.90				
3 1/2	10.80	13.60	16.40	20.70	24.40				
4	11.20	14.20	17.10	21.70	25.80				
5	12.00	15.50	18.80	24.00	28.50				
6	12.80	16.80	20.50	26.30	31.10				
7	13.40	17.70	21.70	28.00	33.20				
8	14.20	19.00	23.30	30.20	36.00				

## TIRE BOLTS



Plain.

#### CHAMFERED NUTS, FINISHED POINT List December 28, 1899

		-		Per 10			
Diamet	er. I	n		Ter 10	34	क्ष	36
		in		80.60	80.95	\$1.40	\$2.20
Length	114	in	. 60	.60	. 95	1.40	2.20
Length	1 1/2	in	.60	.60	. 95	1.40	2.20
Length	1%	in	. 65	. 65	1.00	1.40	2.20
Length	2	in	.70	.70	1.05	1.47	2.20
Length	2 14	in	. 75	. 75	1.10	1.54	2.30
Length	2 1/2	in		.80	1.15	1.61	2,40
Length	2 34	in		. 85	1.20	1.68	2.50
Length	3	in		. 90	1.25	1.75	2.60
Length	3 14	in		. 95	1.30	1.82	2.70
Length	3 1/2	in		1.00	1.35	1.89	2.80

# STEP BOLTS



U. S. S. Cut Threads Price Per 100

nches .	720						34	Per	36
in							\$3.00	4.00	5.40
in							3.10	4.00	5.40
in							3.20	4.00	5.40
in							3.40	4.10	5.40
in							3.60	4.40	5.80
in		on re					3.80	4.70	6.20
in							4.00	5.00	6.70
in							4.20	5.30	7.10
	in in in	in	in	in	in	in	in	in	in         \$3.00         4.00           in         3.10         4.00           in         3.20         4.00           in         3.40         4.10           in         3.60         4.40           in         3.80         4.70           in         4.00         5.00

### SINK BOLTS



With Two Square Nuts

Size,	Inches	2x 14	214 x 14	2 16 x 14
Brass		. \$19.20	20.80	22.40
Iron		2.50	2.60	2.70

#### STOVE RODS ROUND OR FLAT HEAD



Length, inches	R	ound Hea		r, Inches. Flat Head.				
	10	1/4	16	10	1/4	Ye.		
8	\$2.35	\$3.20	\$4.05	\$2.15	\$2.80	\$3.45		
10	2.60	3.65	4.70	2.35	3,20	4.05		
12	2.85	4.10	5.35	2.55	3.60	4.65		
18	3.65	5.45	7.25	3.20	4.80	. 6.40		
24	4.45	6.80	9.15	3.85	6.00	8.15		

# STOVE BOLTS

FLAT OR ROUND HEAD

Standard List, Adopted November 1, 1923 Price Per 100

Length.	[	Diameter, Inches										
Inches	1/8 & 3/2	16	1/4	ra l	3/8	1/2						
34	\$0.85	\$0.85										
	.85	.85	\$1.20									
1/2 5/8	.85	.85	1.20									
34	. 85	. 85	1.20	81.75	\$2.65							
36	.90	.90	1.25	1.80	2.75							
1	.90	. 90	1.30	1.85	2.85	89.50						
1 1/8	.95	.95	1.35	1.90	2.95	9.50						
134	1.00	1.00	1.40	1.95	3.05	9.50						
1 36	1.05	1.05	1.45	2.00	3.15	9.50						
1 36	1.10	1.10	1.50	2.05	3.25	9.50						
1 34	1.20	1.20	1.60	2.25	3.45	9.80						
2	1.30	1.30	1.70	2.45	3.85	10.10						
234		1.45	1.85	2.60	4.05	10.35						
2 1/2		1.60	2.00	2.75	4.25	10.65						
2 34		1.70	2.10	2.90	4.45	10.90						
3		1.80	2.20	3.05	4.65	11.20						
3 1/2		2.00	2.40	3.40	5.15	11.75						
4		2.20	2.70	8.70	5.65	12.30						
4 16		2.40	3.00	4.00	6.15	12.90						
5	4.6553.63	2.60	3.30	4.40	6.65	13.45						
5 1/2		2.80	3.60	4.80	7.15	14.00						
6		3.05	3.90	5.20	7.65	14.55						

100 Bolts in a Box, with Nuts.

#### Assorted

Per Assortment
No. 100 Assortment—Consists of 10 Each %x% and
1 in. and 10 Each ¼x% and 1 in. Flat Head, 10
Each %x½, % and 1 in. and 10 Each ¼x%, 1
and 1¼ in. Round Head, Put Up in a Carton..\$1.50

# BELT OR ELEVATOR BOLTS



#### With Countersunk or Oval Heads Price Per 100

No. 1-Lar	ge Countersunk 1	Heads		
Diameter, In	iches	2 & 1/	15	3/8
Length, %	in	\$2.20	3.00	4.00
Length, %	in	2.30	3.00	4.00
Length, 1	in	2.30	3.00	4.00
Length, 114	in	2.40	3.20	4.30
Length, 1 1/2	in	2.50	3.40	4.60
Length, 1%	in	. 2.60	3.60	4.90
Length, 2	in	2.70	3.80	5.20
No. 2-Oval	Heads			
Diameter I		a Companyor		

Diameter, Inches ....... 3.00 Length, % in..... 4.00 \$2.20 % in..... Length, 2.30 4.00 3.00 Length, 1 2.30 3.00 4.00 Length, 1 1/4 in . . . . . . Length is Measured Under Head.

Will be furnished with Countersunk Head Unless Otherwise Specified.

## AUTO WHEEL BOLTS

SQUARE NECK



Bullet Head, Cold Punched Hexagon Nuts

#### II & Standard Threads

	e 174 174 and	man an			
Diameter, Inches Length, Inches Per 100		$^{rac{36}{2}rac{1}{9}}{2.30}$	$2\frac{\frac{3}{6}}{2\frac{1}{4}}$ 2.50	$2\frac{\frac{3}{6}}{2\frac{1}{2}}$ <b>2</b> . <b>50</b>	$2\frac{3}{4}$ 2.75
Diameter, Inches Length, Inches Per 100		$\frac{\sqrt{a}}{2}\frac{\sqrt{a}}{\sqrt{2}}$ 3.30	3 3 3.60	$\frac{314}{3.80}$	3 ½ 3 ½ 3 .80
Diameter, Inches Length, Inches Per 100		2 ¾ 2 ¾ 4 · 10	1/2 3 4.15	$3\frac{1}{2}$ $4.25$	3 ½ 3 ½ 4 . 25

#### Dimensions

w	F	lead Dir	nensions	Lgth.	U. S. S. Nut		
Diam.	Width	Thick.	Lg.,Sq.	Rod	Thd.	Width	Thick.
3/8	34	i <sup>a</sup> s.	1/8	85	1	12	16
70	7/8	3.3	16	38	1 1/8	11	3/8
1/2	1	36	16	12	114	7/8	1/2

## LAG SCREWS

GIMLET POINT



With Square Head Manufacturers' Standard List, Effective Sept. 1, 1923 Prices Per 100.

Lgth. In.	and	3/8	1,0	1/2	and %	%	7/8	1
1 1/2	1\$2.25	2.70	3.15	3.75				
2	2.45	3.00	3.50	4.15	6.00			
216	2.65	3.30	3.85	4.55	6.50	9.20		
3	2.85	3.60	4.20	4.95	7.00	9.90	15.00	
314	3.05	3.90	4.55	5.35	7.50	10.60	16.00	22.00
4	3.25	4.20	4.90	5.75	8.00	11.30	17.00	23.30
4 1/2	3.45	4.50	5.25	6.15	8,50	12.00	18.00	24.60
5	3.65	4.80	5.60	6.55	9.00	12.70	19.00	25.90
5 14	3.85	5.10	5.95	6.95	9.50	13.40	20.00	27.20
6	4.05	5.40	6.30	7.35	10.00	14.10	21.00	28.50
6 16	5.25	6.70	7.65	8.75	10.50	14.80	22.00	29.80
7	5.45	7.00	8.00	9.15	11.00	15.50	23.00	31.10
7 36	5.65	7.30	8.35			16.20		
8	5.85	7.60	8.70	9.95	12.00	16.90	25.00	33.70
9	6.25	8.20	9.40			18.30		
10	6.65	8.80				19.70		
11	7.05	9.40				21.10		
12	7.45	10.00	11.50	13.15	16.00	22.50	33.00	44.10

#### HANGER TYPE



#### With Pipe Thread.

Nos	1	2	3
Pipe Thread, Inches	1/8	1/4	9%
		.12	. 14

# EXPANSION SHIELDS

DIAMOND



Malleable Iron Long Standard Shields, for Square Head Lag Screws

Free from warp or twist, accurately machined and carefully assembled. Lag Screws are Not Included. For Lag Screws, Diameter, In. 1/4 Length of Shield, Inches . . . 1 1/2 2 % Outside Diameter Shield, In. 1/2 11 16 Diameter Drill Required, In. 1/2 For Lag Screws, Diameter, Inches. . . 1/2 N. Length of Shield, Inches..... 3 1/2 3 1/2 3 1/2 Outside Diameter Shield, Inches.... 34 7/8 11/8 Diameter Drill Required, Inches. . . . . 1 1/4 

#### One Hundred in a Box.

#### DIAMOND SUPER-GRIP

Consist of a cone shaped Brass Nut and a tubular Expansion Shield cast of Lead and Antimony. Grooves on the side of the shield are not cut through, prevent its expansion before it is tightened up in the wall, hold the nut securely in place, and permit easy expansion when bolt is turned up.

Positively resist rust. No calking tool required.

For Machine Bolts



Diam. Bolt, In . . . Lgth. Shield, In.. 1 % 2 1/4 Diam. Hole and Drill, Inches...

Per 100 ...... \$18.00 25.00 38.00 45.00 65.00 For Machine Screws



Without Screws.

Diameter Screw	8-32	10-24	12-24	14 - 20
Length of Shield, Inches.	1/2	1/2	1 1/8	1 1/8
Diam. Hole and Drill, In.	र्नेह	16	76	16
Per 100	\$10.00	10.00	15.00	15.00

#### LOXIN SINGLE



Pressed Steel, for Machine Bolts Without Bolts.

Nos	416L	516L	616L	716L
For Machine Bolt, Diam., In.	14	A.	34	$\sqrt{n}$
Length of Shield, Inches	1 34	2	2	2 1/2
Outside Diam. of Shield, In	1/2	56	54	7/8
Size of Drill Required, Inches		5%	5%	7/8
Weight Per 100, Lbs				
Per 100	\$15.00	18.00	25.00	32.00
Nos		816L	1016L	1216L
For Machine Bolt, Diameter, I	inches	1/2	96	34
Length of Shield, Inches		2 1/2	3	3 1/2
Outside Diameter of Shield, I	nches	7/8	1	1 1/8
Size of Drill Required, Inches.		7/8	1	1 1/8
Weight Per 100 Lbs			3.0	40
Per 100		\$38.00	45.00	65.00

"Loxin" loose or tight holes and will not come apart.

Will carry a greater load and is easier to install.

#### EXPANSION SHIELDS

STAR DOUBLE



Pressed Steel, For Machine Bolts

Without Bolts.

For Bolt, Diam., In	36	1/2	56	34
Length of Shield, In.	1 %	2 %	3	3 %
O. D. and Drill Req.	56	76	1	1 1/8
Weight Per 100, Lbs.	7	15 1/2	26	42
Per 100	\$25.00	38.00	45.00	65.00

Note smaller drill requirements as in comparison with malleable iron. It is necessary to use the proper size drill in order to obtain best results with all expansion shields.

#### KEYSTONE DOUBLE



For Machine Bolts Without Bolts.

Diam., Bolt, Inches	Length, Inches	O. D. and Size Drill Used,	Inches Per' 100
1/4	1 1/2	1/2	\$ 15.00
1g	1 %	γ <sup>®</sup> t	18.00
%	2	12	25.00
16	2 %	7/8	32.00
1/2	2 %	7/8	38.00
%	2 7/8	1	45.00
% %	3 %	1 1/4	65.00
7/8	4 1/2	1 1/2	95.00
1	4 1/2	1 %	110.00
1 1/4	6	2 1/8	250.00
1 1/2	7 1/2	2 1/2	350.00

Made of refined malleable iron. Develop their hold by means of a cone shaped nut and a cone shaped collar drawn by the action of the thread toward each other when encased in two shells having inwardly tapering bores.

#### MACHINE SHIELDS

OPEN BACK



No. 118-"Forway" Malleable Iron, Shields Only

Size, Inches	Length Shield, Inches	Drill Size, Inches	Number in Box	Weight Per 100	Per 100
1/4	1 1/4	1/2	100	4	\$15.00
To	1 1/2	18	100	5	18.00
78	2.14	28	100	7	25.00
54	2 54	1 18	100	171/2	38.00
34	3 1/4	114	50 50	26 50	45.00 65.00

Size denotes diameter of Bolt with which the shield is used.

All Orders for Regular Goods Shipped Same Day Order is Received, Send Us Your Mail Orders.

# SCREW ANCHORS



Without Screws

Size. Inches	Screw No.	Length of Shield, Inches	Outside Diam., Inches	Per 100
1/8 X 1/2	5, 6, 7	1/2	3/4	\$ 4.40
1/8 X 3/4	5, 6, 7	%	1/4	4.40
TEX %	8, 9, 10, 11	34	Yes	5.00
Tax1 Lt.	9, 10, 11	1	70	5.00
Ax1 Hvy.	9, 10, 11	1	3%	5.00
14 x %	12, 13, 14	3/4	10	5.60
14 x1	12, 13, 14	1	70	5.60
1/4 x 1 1/2	12, 13, 14	1 1/2	18	8.00
14 x 2	12, 13, 14	2	16	10.00
16 x 1 ½	15, 16, 17, 18	1 1/2	70	10.00
5 x2	15, 16, 17, 18	2	ī'e	13.00
36 x 2	20, 22, 24	2	76	15.00
1/2 X 2	26, 28, 30	2	%	25.00
%x2	% in. Lag Sc.	2	76 -	30.00

Made of non-corroding, rust-proof composition metal, put up in wooden boxes, 100 to a box.

# EXPANSIVE SCREW ANCHORS ACKERMAN-JOHNSON



For attaching any object to hard materials, as concrete, brick, stone, tile, marble, etc. Their holding power exceeds the tensile strength of the best steel screw or bolt of corresponding size.

Instantly installed without the aid of the screw, and before the fixture is lifted into position to be fastened.

Consists of a doubly tapered internally threaded cone made of brass, iron or steel within a lead-composition ductile sleeve.

Prices Not Including Screws

Anchor Size Nos.	Shipping Weight, Per 1000 Lbs.	Diam. Inches	Depth, Inches	Per 100
6x32	7 1/2	3/4	3%	\$ 3.80
8x32	15	Ye	1/2	4.50
10x24	221/2	96	5/8	4.95
12x24	34	16	3/4	6.50
14 x 2 0	50 1/2	1/2	76	7.20
5 x18	95	56	1	9.75
%x16	162	3/4	11/4	10.80
7a x 14	231		1 1/2	12.90
½ x13	221	7/8 7/8	1 1/2	12.90
% x11	512	1 1/8	2	25.00

Packed 50 or 100 in a Box.

#### PILOTED SETTING PUNCH



Included, without additional charge, with every box of anchors. Extra punches, if needed, furnished on request.

Piloted Setting Punch-When Ordered Separately ... \$0.50

# HAMMERLESS SETTING TOOL



Anchors are set perfectly in thin materials by means of the Hammerless Setting Tool.

ting Tool.

A very handy tool.

Complete instructions
for using furnished
with each tool.

No.	1-For	Setting	Anchor	No.	8x32	- Land	\$1.00
No.	2-For	Setting	Anchor	No	10x24		1 00
No.	3-FOL	Setting	Anchor	No.	12x24		9 00
No.	4—For	Setting	Anchor	No.	¼x20		2.00



An ordinary wood screw, driven home inside a Rawlplug, is held in a vise-like grip in marble, glass, stone, cement, tile, slate, concrete, plaster, brick and even in steel.

Made up of tough jute fibres which are expanded and forced into the surrounding material. Once fastened, a Rawlplug-ed screw is in forever. Absolutely invisible when in position. Unaffected by moisture or change in temperature.

Used by builders, contractors, plumbers, electricians and householders.

#### Price Per 100

(Rawlplugs need only be as long as threaded part of Screw).

Size of	Diam. of	Use					
Rawl-	Drill Hole, &	with	Leng	th Ra	wlplug	, In.	Asst.
plug	Rawplug, In.	Screws	1	114	1 1/2	2 1	gths.
6	3/3	6-7	\$1.45				1.35
8	A -	8-9	1.80				1.80
10	30 +	10-11					
12	1/4	12-13			2.95		
14	787	14-15			3.50		3.25
16	rite.	16-17				4.90	
20	96	20 - 22				6.90	
Sizes	3 to 14, 100	in a Box:	16, 18	and	20, 50	in a	Box.

#### RAWLDRILLS



Made of Special Alloy Steel. Easily Sharpened.

#### Price Per Dozen

 Sizes of Rawldrills—(Corresponding to Size of Rawlplug)
 6
 8
 10
 12

 3 Pt. Drill (for Hard Material).\$
 2.80
 3.00
 3.30
 3.70

 Toolholders
 12.00
 12.00
 12.00
 12.00
 12.00
 12.00

 Sizes of Rawldrills—(Corresponding to Size of Rawlplug)
 14
 16
 20
 3/8

 3 Pt. Drill (for Hard Material).
 3.4.20
 4.80
 6.30
 9.60

 Toolholders
 12.00
 16.00
 16.00
 16.00

 One Dozen in a Box.

### SEBCO DRYVINS



Carries working loads up to 1200 pounds. The Dryvin is inserted in the drilled hole—then with a few blows of the hammer the nail is driven home. This expands the metal, bonding it into the masonry and at the same time locking the lower flange of the shield.

Present a great saving in time and labor.

Complete with Nails

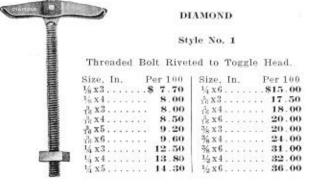
#### Galvanized

 Size, Inches
 1/4 x1
 1/5 x1 1/4
 1/4 x2 1/4
 3/6 x2 1/4
 3/6 x2 1/4
 1/4 x2 1/4
 3/6 x2 1/4

#### PRESENT PRILL POINTS

Type	Star 1/2 7.40

# TOGGLE BOLTS



#### WRIGLEY PATENT



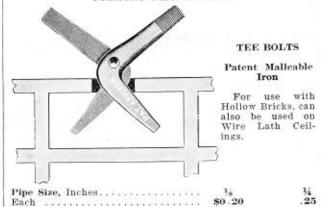
No. 3-Flat Head.

No. 2-Round Head.

# Hood Riveted On, Double Flanged Sides, Rigid Back

No. 3—Flat Head	No. 2—Round Hend
Size, Inches	
Size, Inches	14x4 14x6 5x4
Per 100	

#### DIAMOND PIPE THREAD



# THREADED RODS

# 

#### Continuous Thread, Per 100 Feet

	Lengths,	Per	1	Lengths,	Per
Threads	Feet	100 Ft.	Threads	Feet	100 Ft.
6-32	1	85.00	14-20	2	\$10.00
8-32	1	5.50	14-20	2	10.00
10-24	1	7.00	5-18	2	18.00
12-24	2	8.50	3/4-16	2	30.00

# CAP SCREWS

HEXAGON HEAD

U. S. Standard Thread



List Adopted Feb. 1, 1924

#### Per 100

Dia. of Head	i'e	1/2	Ťe.	%	34	18	76	1	11/6	11/4
Height of H'd.	14	rle .	3/4	₹a	1/2	n'a	%	34	36	1
Thr'ds to Inch	20	18	16	14	13	12	11	10	9	8
Dia. of Screw	34	rie I	%	76	1/2	Te.	%	%	76	1
Length % 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$4.85 4.55 4.70 5.10 5.45 5.90 6.35 7.20 8.05	4.85 5.00 5.25 5.60 6.00 6.55 7.15 7.35 8.35 9.50	5.80 6.00 6.20 6.70 7.15 7.85 8.50 9.15 9.80 10.50 11.15	9 . 10 9 . 75 10 . 45 11 . 20 11 . 95 12 . 65 13 . 40 14 . 15 14 . 90 15 . 65 16 . 25	9,75 9,95 10,80 11,50 12,35 13,15 14,05 15,00 17,00 18,20 19,30 20,55 21,80	15, 85 16, 10 16, 25 17, 50 18, 55 19, 80 20, 85 22, 30 23, 80 24, 95 26, 20 27, 40 28, 60	16.65 16.90 18.10 19.15 20.40 21.30 22.50 22.50 22.50 22.50 22.50 23.00 24.55 26.90 28.10 29.20 30.40 31.65	26.85 27.15 27.45 29.00 30.55 33.70 33.70 33.70 35.80 40.20 42.25 45.85 49.40	41.50 41.90 42.30 45.40 48.40 51.50 56.60 56.60 62.85 67.35 72.60 81.20	60.65 62.90 65.35 67.60 69.90 77.20 80.85 84.60 88.00

\*Add for Each 1/4 Inch.

#### FLAT HEAD

U. S. Standard Thread



List Adopted Feb. 1, 1924

#### Per 100

Diam. of Head	3.0	5%	3/4	12	34	1	1%
Threads to Inch.	20	18	16	14	13	12	11
Diam. of Screw.	14	fe .	%	1 <sup>7</sup> c	1/2	18	54
Length % 1 1 14 1 14 1 14 2 14 2 14 2 14 3 3	\$2.70 3.05 3.35 3.65 3.80 4.00 4.15	3.00 3.35 3.55 3.80 4.10 4.25 4.65 4.95 5.25	3.75 4.15 4.45 4.80 5.20 5.60 6.40 6.80 7.20	5.20 5.65 6.05 6.50 6.90 7.50 8.65 8.60 9.15	6.85 7.35 7.80 8.30 9.00 9.75 10.50 11.20	10.50 11.15 11.80 12.60 13.50 14.25 15.00	11.50 12.15 13.00 14.65 15.40

NOTE

SEE NEXT PAGE FOR CAP SCREW ASSORTMENTS

# CAP SCREWS

BUTTON HEAD

U. S. Standard Thread



List Adopted Feb. 1, 1924

Per 100

Diam. of Head	η <sup>r</sup> e	re	%	%	13	18	1	11/4
Threads to Inch.	20	18	16	14	13	12	11	10
Diam. of Screw	1/4	ŵ	34	Ta .	16	in.	%	34
Length  14 114 114 114 124 214 224 234	\$2.70 3.05 3.35 3.65 3.80 4.00 4.15	3.00 3.35 3.55 3.80 4.10 4.35 4.65 4.95	3.75 4.15 4.45 4.80 5.20 5.60 6.00 6.40 6.80	4.90 5.30 5.65 6.50 6.50 6.50 7.50 8.60 9.15	6.50 6.85 7.35 7.80 8.30 9.70 10.50 11.20	10.50 11.15 11.80 12.60	10.85 11.50 12.15 13.00 13.90 14.65 15.40	16.75 17.80 18.80 19.80

#### OVAL FILLISTER HEAD

U. S. Standard Thread



List Adopted Feb. 1, 1924

1	Pe	ľ	1	0	€

Diameter of Head	36	76	- No	96 1	1/4
Height of Head	1/4	1/4	%	10	1/2
Threads to Inch	20	18	16	14	13
Diameter of Screw.	14	Å	%	in I	1/2
Length, Inches  3/4  1 1  1 1/4  1 1/4  2 2/4  2 3/4  3 3/2	\$2.70 3.05 3.35 2.65 3.80 4.00 4.15 4.35 4.55 4.70	3.00 3.35 3.55 3.80 4.10 4.35 4.65 4.95 5.25 5.55	3.75 4.15 4.45 4.80 5.20 5.60 6.40 6.80 7.20 8.00	4.90 5.30 5.65 6.05 6.50 7.50 8.05 8.05 8.60 9.15	6.10 6.50 6.85 7.35 7.80 8.30 9.00 9.75 10.50 11.20 12.80 14.40

# HEXAGON HEAD, S. A. E.

S. A. E. Thread



List Adopted Feb. 1, 1924

Per 100			
	- 1	Sec. 34	545

Head	14	1/2	rle .	%	%	76	18	1 10
H'ght of Head	-th	M	92	23	%	15	10	1,6
L'ght of Thread	5%	900	38	35	1	1 32	1 %	1 %
Threads to Inch	28	24	24	20	20	18	18	16
Diam. of Screw	14	á	36	176	1/6	1/e	%	34
Length % 1 1/4 1 1/4 1 1/4 2 1/4 2 1/4 2 1/4 2 1/4 4 1/2 1 1/4 4 1/2 1 1/4 1 1	84.35 4.55 4.70 5.10 5.45 5.90 6.35 6.80 7.20 8.05	4.85 5.00 5.25 5.60 6.00 6.55 7.15 7.75 8.35 9.50	5.80 6.00 6.20 6.70 7.15 7.85 8.50 9.15 9.80 11.15	7.50 7.70 7.90 8.50 9.10 9.75 10.45 11.20 11.95 13.40 14.90 16.35	9.75 9.95 10.80 11.50 12.35 13.15 14.05 15.00 17.00	15.85 16.10 16.35 17.50 18.55 19.80 20.85 23.80 26.20	16.65 16.90 18.10 19.15 20.40 21.30 24.55 26.90	26.55 26.85 27.15 27.45 29.00 30.55 33.70 38.00 42.25

# CAP SCREWS

BRASS, HEXAGON HEAD



Per 100

Diam. Screw In,	1/4	ร์ช	3/8	Ås	1/2
Length	\$6.80	\$7.80	\$8.30	\$ 9.50	\$10.80
1	7.00	7.90	8.70	10.10	11.50
1 34	7.10	8.20	9.10	10.60	12.70
1 36	7.30	8.50	9.50	11.10	13.00
2	7.70	9.10	10.30	12.20	14.30
214	8.10	9.70	11.10	13.30	15.80

Hexagon Brass Cap Screws can be Furnished with Hexagon Brass Nuts to be Used as Machine Bolts at Following Extra Per 100.

Bolt Diam., In..... \$2.30 3.10 4.90 6.90 9.20 Per 100 .....

# SET SCREWS

CASE HARDENED





Square Head, Cup Point.

Headless, Slotted, Cup Point.

#### U. S. S. Standard Thread-Per 100 Standard List Effective Feb. 1, 1924

Dia, of Head	34	ŵ	%	rk.	1/2	l'e	96	34	76	1
Hght of Head	ılı .	11	22	21	96	23	3.9	rît .	37	94
Thr'ds to Inch	20 18 16		14 13		12	11	10	9	8	
Dia. of Screw	34	te	96	re .	1/2	å	%	%	16	1
Length	\$2.80 2.85 2.90 3.10 3.25 4.55 4.55 5.10 5.35 5.65	3.25 3.40 3.55 3.90 4.20 4.70 5.20 5.65 6.15	3.65 3.70 3.75 4.00 4.80 5.25 5.90 6.55 7.75 8.40 9.00	10.90 11.70 12.45 13.25 14.00	8.35 9.10 9.80 10.60 11.40 12.15 12.35 14.15 15.35 16.60 17.85	11.15 11.35 11.55 11.75 12.90 13.80 14.85 16.00 17.15 18.25 19.75 21.20 22.70 24.20	12.35 13.30 14.20 15.30 17.65 18.85 20.40 21.90 22.30 24.85 25.40 27.95	21.10 21.50 21.90 22.30 22.70 24.40 26.10 27.80 29.35 31.30 33.20 35.20 37.10 39.50 41.85	35.70 36.20 36.70 37.20 39.80 42.30 44.80 47.40 50.00 52.80 55.60 561.15 63.85	47.50 48.10 48.70 53.35 57.20 66.65 67.3.20 77.50 82.10

# BIBB SCREWS



Brass, Assorted

Per Assortment Peerless Handy Can-Consist of One Gross Assorted Brass Bibb Screws Put Up in a Friction Top Can, Handy for the Plumber or Repair Man's Kit . . . . \$1.60

# CAP AND SET SCREW ASSORT-MENTS

CAP SCREWS



S. A. E. Standard Thread Per Assortment

No. 4 Assortment-Consists of 50 Assorted S. A. E. Thread Cap Screws, as Enumerated Below, Put Up in a Strong Package..... \$2.00

Contents of No. 4 Assortment 3 Each ¼x1, 1¼.

3 Each %x1%. 3 Each 16x1, 11/4, 11/2.

3 Each 1/2x11/4, 11/4, 11/4, 11/4, 3 Each 1/2x11/2, 11/4, 2, 21/4, 4 Each %x14,1%. 2 1/2.

> U. S. Standard Thread Per Assortment

No. 3 Assortment-Consists of 50 Assorted U. S. S. Thread Cap Screws, as Enumerated Below, Put Up in a Strong Package......\$2.00

Contents of No. 3 Assortment 3 Each 14x1/2, 34.

3 Each %x1¼, 1½. 2 Each √x¾, 1, 1¼. 4 Each Ax34, 1.

7 Each %x %. 3 Each 1/2 x1. 6 Each %x1, 4 Each 1/2 x1 1/4. 1 1/2.

#### SET SCREWS

U. S. Standard Thread Per Assortment

No. 1 Assortment-Consists of 100 Assorted U. S. S. Thread Case Hardened Cup Point Set Screws, as Enumerated Below, Put Up in a Strong Pack-

3 Each ¼x½, ¾, 1. 3 Each ½x½, ¾, 1, 1¼. 3 Each %x½. 3 Each 78x %, 1, 1 14, 1 1/2. 5 Each ½x¾, 1¼, 1½. 8 Each ½x1,

10 Each %x %, 1, 1 %. 3 Each 1/2 x1 1/4, 2. 5 Each %x1 1/2.

SAFETY SET SCREWS





Cold Drawn, Hexagon Hole, Cup Point

Eight Wrenches Free with Each 100 Set Screws Except 1 in, Size, on which Four are Furnished.

1/4 Diam. Screw, In . . . . . 1/2 Length Screw, In . . . . Size Hex. Hole, In . . . . U. S. S. Threads.... 2.0 14 Screws ......Per 100, \$5.00 5.00 5.00 5.00 6.00 .05 .03 .04 .04 .05 .06 Ex. Wrenches . . . Each,

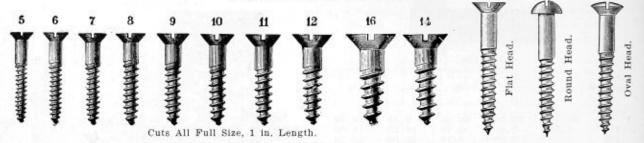
1/2 Diam. Screw, In . . . . 1/2 34 Length Screw, In . . . . 56 Size Hex. Hole, In . . . 14 14 13-12 13-12 12 U. S. S. Threads.... 11 Screws . . . . . Per 100, \$6.00 7.00 7.00 8.00 10.00 10.00 .06 .07 .07 Ex. Wrenches . . . Each,

1 Diam. Screw In . . . . . 1 1/8 114 Length Screw, In . . . . 1/2 Size Hex. Hole, In . . . 1/2 18 10 10 9 9 U. S. S. Threads....

Screws . . . . . Per 100, \$13.00 12.00 15.00 18.00 20.00 22.00 Ex. Wrenches . . . Each, .10 .10 .12 .12 .15

### IRON WOOD SCREWS

FLAT, ROUND AND OVAL HEAD



List of June 24, 1922. Weights Pounds and Price Per Gross

No.	14 Inch Wt. Gro. Gro	. N		Inch Gro. Gro		Vt. G	neh ro. Gro.	No.	96 Ib Wt. G		ro.	No.	¾ In Wt.Gr	ch o. Gro.	No.	% 1 Wt. 0	I <b>nch</b> Gro. G	iro.	No. Wt	Inch Gro.	Gro.
0	.03 \$0.9	0 0	. 0	4 80.9	0 1	.07	\$0.90	2	.12	\$0.	90	2	.14	\$0.90	3	. 2	\$0.	95	3 .:	3 8	9.95
1	.04 .9	0 1	. 0	5 .9		.10	.90	3	.16		90	3	.18	.90	4	.21		95	4 .	0 :	1.00
2	.06 .9	0 2	. 0	8 .9	0 3	.13	.90	4	.20		90	4	.23	. 95	5	. 3	1 1.	.00	5 .3	8	1.05
3	.08 .9	0 3	. 1	0 .9	0 4	.17	.90	5	.25	- 0	95	5	.29	.95	6	. 43	1 1.	05	6 .	7	1.10
4	.10 .90	0 4	. 1	3 .9	0 5	.21	.90	6	.31	- 1	95	6	.36	1.00	7	. 50	1.	10	7 .	7	1.15
		. 5	. 1			. 26	.90	7	.38	1.	00	7	. 44	1.05	8	. 60		15	8 .		1.20
			. 2			. 31	. 95	8	. 45	1.	05	8	.53	1.10	9	. 73		20	9 .		1.25
		. 7	. 2			.38	1.00	9	.53	1.	10	9	.62	1.15	10	.83			10 .		1.30
		. 8	. 3	0 .9		.45	1.05	10	. 63			10	.73	1.20	11	.96			11 1.0		1.35
		1 34			. 10	. 52	1.10	11	.72			11	. 84	1.25	12	1.10			12 1.3		1.40
								12	. 83	1.		12	.96	1.30	14	1.41	1.		14 1.5		1.60
100												14	1.24	1.40	1.0				16 1.5	6 1	1.85
No.	1¼ Inch Wt. Gro.	Gro.	No.	1½ In Wt. Gro.		No.	1% I Wt. Gro		ro.	No.	2 1 Wt. G	Inch	Gro.	No. 7		Inch	Gro.	No.	21/2 Wt. Gr		Gro.
4	.37 81	.10	4	. 44	\$1.20	6	.79	81.	40	6	. 8	9	81.55	6	1.0	0 \$	1.75	6	1.10	81	. 95
5		.15	5	. 55	1.25	7	. 95	1.	45	7	1.0		1.60		1.2		1.80	7	1.33		2.00
6	.57 1	.20	6	.68	1.30	8	1.13	1.	50	8	1.2	8	1.65	8	1.4	3	1.85	8	1.58	. 1	2.05
7	.69 1	.25	7	. 82	1.35	9	1.32	1.	60	9	1.5	0	1.75	9	1.6	8	1.95	9	1.86	1	2.15
8		.30	8	.98	1.40	10	1.54	1.	70	10	1.7	4	1.85	10	1.9	4 :	2.05	10	2.15	1	2.25
9		.35	9	1.15	1.45	11	1.77	1.	80	11	2.0	0	2.00	11	2.2	3 5	2.20	11	2.46	. 1	2.40
10		.40	10	1.34	1.50	12	2.02			12	2.2		2.20	12	2.5	4 :	2.40	12	2.81	. 1	2.60
11		.50	11	1.54	1.60	14	2.57	2.	25	14	2.9	0	2.50	14	3.2	3	2.75	14	3.56	2	3.00
12		.60	12	1.75	1.80	16	3.19			16	3.5		2.90		4.0		3.20	16	4.41		.50
14		.80	14	2.23	2.05	18	3.88			18	4.3		3.40	18	4.8		3.75	18	5.38	4	1.10
16		05	16	2.78	2 35	20	4.65	3.	60	20	5.2	4	4.00	20	5.8	2	4.40	20	6.40	4	1.80
18	2.90 2	.40	18	3.39	2.75																
			20	4.07	3.25																
No.	2¾ Inch Wt. Gro.	Gro.	No.	. 3 Inc Wt. Gro.	h Gro.	No.	3½ b Wt. Gro		ro.	No.	4 I Wt. G		Gro.			Inch	Gro.	No.	5 h Wt. Gr		Gro.
8	1.73 82	. 15	8	1.88	\$2.45	10	2.96	\$3.	00	12	4.3	9	\$3.80	14	6.2	1 8	5.10	14	6.93	-	. 75
9		.25	9	2.20	2.55	11	3.39		120-25	14	5.5		4.50		7.6		5.90	16	8.48		. 70
10		.45	10	2.55	2.65	12	3.86			16	6.8		5.20		9.2		6.90	18	10.27		. 80
11		.60	11	2.93	2.80	14	4.88		TD(2/\ 1	18	8.3		6.10		11.0	-	8.00	20	12.23		.00
12		.80	12	3.33	3.00	16	6.04		200	20	9.9		7.10		15.1		0.70	24	16.94		.90
14		.25	14	4.22	3.50	18	7.32				13.5		9.50	10000		TO. 33		100			
16		.80	16	5.22	4.10	20	8.73	6.				-		1				1000			
			The said			1 200	7 7 7 7		Control of the Control												

Carried in Stock in: Flat Head Bright; Round Head Blued; Round Head Nickel Plated.

an Inch.

Lengths and diameters not listed are specials, but are furnished to the extent they may be in stock, or when required in sufficient quantities of a size to warrant being made to order. Such non-listed lengths and diameter take the list prices of the next longer or larger listed sizes.

The following varieties of Iron Screws are invoiced from this list at varying discounts; Flat, Round, Fillister, Piano and Oval Head Screws, Dowel, Winged, Headless, Pinched, Bung Head and Felloe Screws, Bright, Blued, Nickel Plated, Silver Plated, Brassed, Bronzed, Coppered, Japanned, Lacquered, Tinned, Galvanized and Sheradized.

#### IRON DRIVE SCREWS

7.57

10.38

4.80

5.60

7.40

5.85

6.98

5.20

20

20



Drive Screws are driven in with a hammer like nails, but they have a greater holding power and can be withdrawn with an ordinary screw driver,

They are made in iron, flat head only, from ½ to 3 inch length; and conform with the listed diameters from 4 to 20 (screw gauge) in diameter.

Prices Same as Iron Wood Screws

#### SCREW GAUGE IN DECIMALS OF AN INCH

Note-See Below for Screw Gauge in Decimals of

No.	Inch	No.	Inch	No.	Inch	No.	Inch
0	.060	5	.125	10	.190	16	.268
1 2	.073	6	.138	11	.203	18	. 294
	.086	7	.151	12	.216	20	.320
3	.099	8	.164	14	.242	24	.372
4	.112	9	.177				

## BRASS WOOD SCREWS







Flat Head.

Round Head.

Oval Head,

List of June 24, 1922 Price Per Gross Weight of Brass Screws 8% Higher Than Iron on Preceding Page

34 Inch	¾ Inch	1/2 Inch	% Inch	34 inch	% Inch	1 Inch	134 Inch
No. Per Gross						No. Per Gross	
0\$0.95	0\$0.95	1\$1.05		2\$1.30	4\$1.50		682.30
195	.1 1.00	2 1.10		3 1.35	5 1.65	1000 D.M. T.O. WOOD A.O. T	7 2.60
2 1.00		3 1.15	4 1.30	4 1.40	6 1.85		8 2.95
3 1.00				51.50	7 2.10		9 3.30
4 1.05			6 1.55	6 1.70	8 2.35	8 2.55	10 3.65
					9 2.60	9 2.85	11 4.10
				8 2.15	10 2.90	10 3.15	12 4.60
			9 2.15	9 2.40	11 3.20	11 3.50	145.65
						12 3.90	
				123.25			
1½ Inch	1 1/4 Inch	2 Inch	234 Inch	2½ Inch	3 Inch	Lengths and	1:
No. Per Gross	No. Per Gross	listed are spec	diameters not				
6\$2.65	8\$3.75	8\$4.25	1085.95	1086.60	1289.75	furnished to th	e extent they
7 3.00	9 4.25	9 4.75	11 6.70	11 7.40	1412.00	may be in stoc	k or when re-
8 3.35		10 5.35	12 7.50			quired in suffic	ient quantities
9 3.75				1410.25	1817.70	of a size to	warrant being
10 4.20	12 6.10		1611.30	16.,,,13.00	3 1/2 Inch	made to order.	Such non-list-
11 4.70		14 8.35	1813.60	1815.00	12\$11.25	ed lengths and	diameters take
12 5.35					14 14.00	the list prices	of the next
14 6.55		1812.30		1111111111111111	16 17.00	longer or large	n listed sizes
							T Histed Sizes.

The following varieties of Screws are invoiced from this list at varying discounts: Flat, Round and Oval Head Screws, of Brass, Bronze Metal, Nickel and Silver Plated on Brass.

Carried in Stock: Flat, Round and Oval Head Brass, and Flat, Round and Oval Head Brass Nickel Plated.



# SHEET METAL SCREWS

#### PARKER-KALON HARDENED

Parker Hardened Sheet Metal Screws are used in place of stove bolts and rivets for joining and making fastenings to sheet metal. They are threaded clear up to the head so they may be turned till the head is flush with the metal. They draw up tight and stay tight, all that is necessary is to punch a hole slightly smaller than the screw with an ordinary prick punch, or use the stop punch illustrated below.

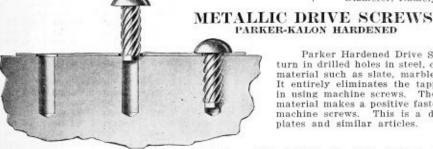


PARKER STOP PUNCH

	Ro	und H	ead			
Nos	6	7	10	10	14	14
Length, In	3%	1/2	34	1 1/4	7/8	1 1/2
Diam., In	23	1/8	15	10	1/4	1/4
Per Gross	\$0.76	.82	1.08	1.34	1.32	1.70
	One Gr	oss in	a Box	Κ.		



In order to obtain satisfactory results, it is important that the holes be made neither too large nor too small. The Stop Punch makes the hole exactly right. Each Stop Punch makes the hole exactly right. Each



Parker Hardened Drive Screws will cut their own threads and turn in drilled holes in steel, cast iron, die casting metals and other material such as slate, marble, etc., under the blow of a hammer, It entirely eliminates the tapping operation, the most costly item in using machine screws. Their hardened thread, cutting into the material makes a positive fastening—as strong as, or stronger than machine screws. This is a distinct advantage in attaching name plates and similar articles.

Nos. 00 to 6 Inclusive Furnished Brass Plated Finish, Nos. 7 to 14 Inclusive Furnished in Plain Steel

Dia.	Length,	Hole	Drill	Per	Dia.	Length,	Hole	Drill	Per	Dia.	Length,	Hole	Drill	Per
No.	Inches	Req.	No.	1000	No.	Inches	Req.	No.	1000	No.	Inches	Req.	No.	1000
00	1/4	.052	5.5	\$0.86	4	1/4	.104	3.7	\$1.42	8	56	.144	27	\$2.47
00	3.	.052	55	. 86	4	Pa.	.104	3.7	1.42	10	3/8	.160	20	2.75
00	1/4	.052	5.5	. 86	6	1/4	.120	31	1.62	10	1/2	.160	2.0	2.75
0	1/4	.067	51	.93	6	10	.120	31	1.62	10	5/8	.160	20	2.75
0 -	3.	.067	51	.93	6	3/8	.120	31	1.62	12	1/2	.196	9	3.05
0	1/4	.067	51	. 93	7	The .	.136	29	1.91	12	5/8	.196	9	3.05
2	1/6	.086	4.4	1.00	7	3/6	.136	29	1.91	12	3/4	.196	9	3.05
2	J.	.086	4.4	1.00	7	1/6	.136	29	1.91	14	1/2	.218	2	3.73
2	1/4	.086	4.4	1.00	8	3/8	.144	27	2.47	14	5/8	.218	2	3.73
4	3.	.104	37	1.42	8	1/2	.144	27	3.47	14	3/4	.218	2	3.78

1000 in a Box.

# IRON MACHINE SCREWS









Flat Head

Fillister Head.

Oval Head.

Round Head.

#### FLAT, FILLISTER, OVAL AND ROUND HEAD

List of June 15, 1921					List Per Gross						
Threads Per Inch	56 64	48 56	36 40	40 44	32 40	32 36	24 32	24 28	20 28	18 24	16 24
Diameter	2	3	4	5	6	8	10	12	34	16	76
Length											
1/8	80.30	\$0.30	\$0.30	80.35	80.35						
rie .	.30	.30	.30	.35	.35	\$0.40					
34	.30	.30	.30	. 35	. 35	.40	\$0.60				
16 3/8 1/4 1/2	.32	.32	.32	.37	.37	.44	.65	\$0.75	\$1.15		
38	.32	. 32	.32	.37	.37	.44	. 65	.75	1.15		
16	.34	.34	.34	. 39	.39	. 48	.70	.80	1.20		
1/2	.34	. 34	. 34	. 39	. 39	. 48	.70	. 80	1.20	\$2.00	\$2.40
% % %	.37	. 37	.37	.42	.42	.52	.75	-85	1.25	2.10	2.50
3/4	.41	.41	.41	. 46	. 46	. 56	. 80	. 90	1.30	2.20	2.60
3/8	.45	. 45	.45	. 50	.50	. 60	. 85	. 95	1.40	2.30	2.70
1			.50		. 55	. 65	.90	1.00	1.50	2.40	2.80
1 1/8			. 55	. 60	.60	. 70	1.00	1.10	1.60	2.60	3.00
1 14			. 60	. 65	. 65	.75	.1.10	1.20	1.75	2.80	3.20
1 1/2			.70	.75	.75	. 85	1.30	1.40	2.10	3 - 20	3.60
1 %				.95	.95	1.05	1.50	1.60	2.50	3.60	4.20
				1.15	1.15	1.25	1.70	1.80	2.90	4.00	4.60
2 1/4						1.45	1.90	2.20	3.30	4.40	4.80
2 1/2						1.65	2.20	2.50	3.50	4.90	5.30
2 %						1.90	2.50	2.90	4.00	5.40	5.90
3	e no corrección de			CONTRACTOR OF THE PARTY		2.30	2.90	3.50	4.50	6.00	7.40

# BRASS MACHINE SCREWS









Flat Head.

Fillister Head.

Oval Head.

Round Head.

#### FLAT, FILLISTER, OVAL AND ROUND HEAD

List of June 15, 1921						List Per Gross					
Threads Per Inch	56 64	48 56	36 40	40 44	32 40	32 36	24 32	24 28	20 28	18 24	16 24
Diameter	2	3	4	5	6	8	10	12	34	र्नेत	36
Length										10	7.0
1/8	80.32	80.32	\$0.36	80.46	80.46				Lawrence von		
18 14 18 38 16	.32	.32	.36	.46	.46	\$0.70				1	
34	. 32	.32	.36	. 46	.46	.70	\$1.00				
rik	.34	.34	.38	.49	. 49	.75	1.05	\$1.35	\$2.80		
3/8	. 36	.36	.40	.52	.52	.80	1.10	1.45	2.90		
70	.38	.38	.42	.55	. 55	. 85	1.15	1.55	3.05		
1/2 5/8 3/4 7/8	. 40	. 40	. 44	.58	.58	.90	1.25	1.65	3.20	85.00	85.7
56	. 46	. 46	. 50	. 66	. 66	1.00	1.45	1.85	3.50	5.50	6.5
34	. 52	.52	. 56	.74	.74	1.10	1.65	2.05	3.80	6.00	6.7
76	.58	.58	. 62	.82	.82	1.20	1.85	2.25	4.10	6.50	7.4
1			.70	.90	. 90	1.30	2.05	2.45	4.40	7.00	8.5
1 1/8			-80	1.05	1.05	1.45	2.20	2.65	4.65	7.50	9.0
			.90	1.20	1.20	1.60	2.35	2.85	4.90	8.00	9.9
			1.10	1.50	1.50	1.90	2.65	3.25	5.50	9.00	12.0
1 %				1.90	1.90	2.30	3.05	3.75	6.20	10.00	12.7
				2.30	2.30	2.70	3.45	4.25	7.00	11.00	13.5
2 1/4						3.10	3.85	4.75	8.00	12.00	14.9
2 1/2							4.65	5.80	9.00	13.50	15.5
2 %							6.00	7.00	10.00	15.00	17.0
3							7.50	8.50	11.00	16.50	19.0

Carried in Stock-Nickel Plated, Brass Machine Screws, all kinds and sizes; Bronze and Special Finishes can be furnished to order.

Lengths, diameters and threads per inch not listed are special; but are furnished to the extent that they may be in stock, or when required in sufficient quantities of a size to warrant being made to order. Such non-listed lengths and diameters priced depending upon quantity.

Coarse thread pitches shown in heavy face type are furnished regularly. Their use is recommended. Fine thread pitches shown in light face type can be furnished. Round and Fillister Head Screws are measured from under Head. Flat Head are measured over all.

		SCHEW OA				н			
Nos.	2	3	4	5	6	8	10	12	14
Inches	.086	.099	.112	.125	.138	.164	.190	. 216	. 242

# MACHINE SCREW NUTS

HEXAGON



List of August 15, 1921. Tapped, Cold Punched, Iron and Brass Price Per Gross

Nos.	Thread	Diam., In.	Thick- ness, In.	Iron	Brass
2	36	16	16	\$0.50	\$1.51
3	4.8	10	110	.50	1.51
4	3.6	1/4	379	.36	1.08
4	4.0	1/4	1/2	. 36	1.08
5	40	16	10.4	.36	1.08
6	32	ਪੰਜ	1/1	.36	1.08
8	3.2	31	3/8	. 40	1.30
10	24-32	3/8	1/8	.43	1.73
12	24	16	1/2	. 55	2.16
34	20-28	1/2	10	.72	2.81
Ye	18-24	16	372	1.22	6.05
3/8	16-24	56	1/4	1.58	8.21

SQUARE

Cold Punched



Iron and Brass

Tapped, Per Gross List of August 15, 1921.

Nos.	Thread	Outside Diam., In.	Thick- ness, In.	Iron	Brass
2	56	1/6	1 <sup>3</sup> e	80.42	81.28
3	4.8	200	16	.42	1.28
4	36	14	3.	.31	.92
4	4.0	1/4	27	.31	. 92
5	40	Ye.	n'r	.31	. 92
6	3.2	16	77	.31	. 92
8	32	33	1/8	.35	1.11
10	24-32	3%	1/8	.37	1.47
12	24	170	32	. 46	1.83
1/4	20-28	1/2	130	.62	2.39
16	18-24	76	-7-	1.04	5.14
3/8	16-24	5%	1/4	1.35	6.98

All Above, One Gross in a Box.

# STOVE BOLT NUTS



Cold Pressed and Tapped

Size, Inches	1/8	do	15	1/4	16	3/8
Threads		28	24	20	18	16
Dia. Across Flats, In		3.3	3/8	1/2	78	5/8
Thickness, Inches		1/8	1/8	16	72	3/4
Per 100	80.24	.24	. 26	.43	.72	.94
	100 in a	Box.				

#### BRASS NUTS



#### SEMI-FINISHED HEXAGON

Full and Jam (or Check)

Size	Diameter, Inches	Full Thick- ness, Inches	Jam, Thick- ness, Inches	Per 100
14-20	1/2	1/4	30	\$ 2.40
-%-18	12	y <sup>8</sup> c	372	3.20
3/8-16	11	3%	1/4	5.20
7x-14	34	70	32	7.20
1/2-12	7/8	1/2	re .	9.60
1/2-13	7/8	1/2	र्गंड	9.60
56-11	1 16	5%	3/8	17.00
3410	1.14	34	J.,	27.00

# BRASS CAP NUTS



HEXAGON

Plain Brass and Nickel Plated Brass

Size of Thread	Diam. Base, Inches	Height, Inches	Per 100
6-32, 8-32	- de	75	\$0.80
10-24, 12-24	3/8	13	1.00
14-20, 14-20	la de	3/6	1.25
1/4 -20	1/2	33	1.60
76-18, 20-18	16	1/c	2.00
3/8 -16	56	1/2	2.80
16-14, 1/2-13	3/4	196	4.50
%-11	18	3/4	15.00

### KNURLED BRASS SCREWS



Style No. 1, Per 100

Size	Diameter	1/2	34	1
Thread	Head, In.	Inch	Inch	Inch
4-36	16	\$1.50	1.90	31-4-309-04
6-32	76	1.75	2.10	2.50
8-32	13	2.00	2.40	2.90
10-24	76	2.40	2.80	3.30
12-24	1/2	3.00	3.50	4.10
34 -20	20	3.50	4.20	5.00

### KNURLED BRASS NUTS



Size.	Diam.				Diam.		Per
Thra	Hd., In.	In.	100	Thra	Hd., In.	In.	100
4-36	3%	32	\$1.20	10-32	1/2	21	\$1.50
6-32	A S	3.2	1.20	12-24	1/1/2	33	1.70
8-20	76	16	1.30	14-20	5/8	3/8	2.00
10.01	9.7	2.1	1 50				

# BRASS WING NUTS



Pressed, Smooth Finish

Size No.	Size of Threads	Height to Top of Wings	Width Overall	Outside Diam.	Per 100
A	4-36, 6-32, 8-32	81	3/4	22	\$1.50
В	10-24, 10-32	2.7	18	1.3	1.80
C	12-24, 1/4-20	8.7	1 %	13	2.25
E	A-18	1.1	1 1/2	81	3.75
F	3/8 - 16	53	1 34	18	5.50

# STEEL WING NUTS

Pressed, Smooth Finish



Machine	Screw	Sizes

No. of Screw	6	8	10	10	12
Threads	32	32	24	3.2	24
Per 100		. 90	.90	.90	.90
	Fract	ional Size	es		
Size, Inches	15	1/4	1/4	70	16
Threads	24	20	28	18	24
Per 100	\$0.90	1.00	1.00	1.25	1.25
Size, Inches		3/8	3%	$\gamma^{7} \sigma$	1/2
Threads		16	24	14	13
Per 100		81.60	1.60	3.60	3.75

# MALLEABLE IRON THUMB NUTS

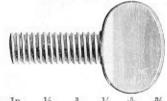


T	h	r	e	id	le	d	

Nos	30	31	32	33
Size, Inches	The same	1/4	16	36
Threads Per Inch	24	20	18	16
Per 100	\$1.10	1.30	1.60	2.15
Nos	34	35	36	37
Size, Inches	16	1/2	5%	34
Threads Per Inch	14	13	11	10
Per 100	\$2.75	3.70	6.00	7.00

## THUMB SCREWS MALLEABLE IRON

No. 1 Threaded



Price Per 100

Diam. S	crew, In.	1/8	Ta .	3/4
Width H	lead, In	5%	14	7/8
Threads	to Inch.	40	24	20
Length 3	Screw-			

58 16 74 16 78 16 72 58 16 78 1 116 114 15 40 24 20 18 16 14 13	56	14	7/4	1	12	1.14	1.5
	40	24	20	18	16	14	13

11/2	in.						
2	in.				i		
2 1/2	in.				į.		
3	in.	E	9	S	0	9	

1 in..... \$3.10 1.70 2.10 2.70 3.40 4.60 5.80  $\ldots \, 2.20\, 2.70\, 3.40\, 4.20\, \ 5.80$ .... 2.80 3.30 4.10 5.00 7.00 8.60 .... 4.30 5.20 6.20 8.60 10.40



# .... 5.30 6.30 7.40 10.20 12.20 SEMI-FINISHED NUTS

U. S. S. THREAD, HEXAGON

Tapped and Faced True on Bottom. List Adopted September 1, 1923.

Size Bolt, Inches	No. of Threads	Width, Inches	Thickness, Inches	Semi-Fin. Per 100
1/4	20	1/6	1/4	\$ 2.00
rte	18	3.8	1/2	2.50
3/6	16	44	3/8	3.25
16	14	8.9	via.	4.10
1/2	13	7/8	1/2	5.00
18	12	33	700	6.00
98	11	176	5%	6.50
34	10	1 1/4	3/4	9.50
7/8	9	1 70	7/8	13.50
1	8	1 %	1	20.00

#### S. A. E. THREAD, HEXAGON



Tapped and Faced True on Bottom List Adopted Sept. 1, 1923.

Screw Diam., In.	Thrds. Per In.	Width In.	Diam. Facing In.	Thick. Reg. ln.	Per 100
1/4	28	1,4	7	372	\$2.00
परि	24	1/2	1/2	17	2.50
96	24	Ye	To l	24	3.25
16	20	58	5%	3/8	4.10
1/2	20	34	34	70	5.00
Ye.	18	3/8	7/6	21	6.00
5/8	1.8	1.5	15	8.5	6.50
34	16	$1\frac{1}{16}$	1 70	31	9.50
76	14	1 14	1 1/4	62	13.50
1	14	170	176	76	20.00

### SEMI-FINISHED NUTS



U. S. S. THREAD, HEXAGON JAM

Tapped and Faced True on Bottom

List Adopted Sept. 1, 1923.

Size Bolt, Inches	No. of Threads	Width, Inches	Thickness,   Inches	Per 100
1/4	20	1/2	10	\$ 2.00
r <sup>f</sup> e	18	18	572	2.50
3/8	16	11	1/4	3.25
70	14	85	22	4.10
1/2	13	7/8	16	5.00
16	12	93	33	6.00
56	11	110	3%	6.50
34	10	1 1/4	16	9.50
7/8	9	1 70	1/2	13.50
1	8	1 %	18	20.00

#### HOT PRESSED NUTS

THREADED

U. S. Standard Thread List Adopted September 1, 1923. List Per Pound, in 200 Pound Kegs





Square.

Hexagon.

#### SQUARE

For Bolt Inches	Hole, Inches	Width, Inches	Thick., Inches	Number in Keg	Per Pound
1/4	70	1/2	1/4	14760	\$0.15
202	1/4	58	16	7915	.135
3/8	64	11	3/8	5320	. 116
Ta	33	66	170	3400	.109
1/2	53	76	1/2	2540	. 107
16	28	81	10	1690	. 107
58	83	114	5%	1440	. 100
3/4	%	1 1/4	34	880	.092
7/8	41	170	76	578	.090
1	55	1 %	1	397	.090
1 1/8	18	113	11/8	284	.090
1 1/4	170	2	11/4	220	.090
1 %	1 2	2 %	1 %	157	.091
1 1/2	1 22	2 %	1 1/2	127	.094

#### HEXAGON

For Bolt, Inches	Hole, Inches	Width, Inches	Thick., Inches	Number in Keg	Per Pound
1/4	Tile.	1/2	1/4	18600	\$0.225
Ya	34	33	Yan	9760	.20
3/8	53	11	3/8	6400	. 156
10	3.2	85	Ye.	4250	.143
1/2	38	7/8	1/2	3200	.135
Te	28	9.5	20	2275	. 135
78	88	116	5%	1630	. 124
94	56	11/4	34	1050	.110
7/8	61	170	7/8	665	.108
1	85	1 %	1	460	.108
1 1/8	18	113	1 1/8	305	.108
11/4	110	2	1 1/4	260	.108
1 %	1 32	2 10	1 %	190	. 110
1 1/2	1 92	2 %	1 1/2	150	.112

Special Screws, Bolts and Nuts, Odd Sizes or Finishes, Will Receive Our Special Attention. Send Us Your Inquiries.

# SLOTTED NUTS

U. S. S. THREAD



Semi-Finished

Bolt, Inches	Width, Inches	Thick- ness, Inches	Width of Slot, Inches	Depth of Slot, Inches	Size Cotter Pin, In.	Per 100
1/4	1/2	34	332	32	10 A	\$1.40
AT ST	39	18	1/8	1/8	372	1.65
3/8	11	36	1/8	18	132	2.15
16	88	170	1/8	23	32	2.90
1/2	7/8	1/2	32	1gt	1/8	3.40
16	81	n'a	32	1 <sup>3</sup> 0	1/8	4.40
5/8	1 16	5%	34	14	rb	5.40
8/4	1 1/4	3/4	1/4	St.	r <sup>3</sup> er	8.40
7/8	1 75	78	r's	33	3/4	9.00
1	1 %	1	1°E	า <sup>ร</sup> ์ฮ	34	14.40

# CASTELLATED NUTS

S. A. E. STANDARD



Hexagon Head, Threaded

Diam. Screw In.	No. Thr'ds to Inch	Total Thick- ness, In	Diam. Across Flats	Depth Slot, Inches	Width Slot, Inches	Diam. Cotter Pin. In	Per 100
1/4	28	9	via.	-25-	1/4	ria:	\$1.50
vit.	24	21	1/2	33	10.4	16	1.75
3%	24	13	200	1/8	1/8	3/2	2.25
70	20	88	5/8	1/8	1/8	32	3.00
1/2	20	78	3/4	37	1/8	32	3.50
120	18	82	7/8	3	32	3/8	4.50
5%	18	68	18	1/4	32	1/6	5.50
11	16	62	1	1/4	32	1/8	6.25
3/4	16	13	1,1	14	3/2	1/8	8.50
7/8	14	88	134	14	1/2	1/8	10.00
1	14	1	1 7	1/4	22	1/8	15.50

# STEEL BALLS



#### HOOVER STEEL BALLS Hardware Grade

For ordinary use as	on Bic	ycles, B	Coller S	kates,	etc.
Size, Inches	.60	. 60	. 75	.90	1.05
Size, Inches	\$1.25	1.44	${\bf 1.67}$	2.00	2.40
Size, Inches	\$2.82	3.22	4.49	6.00	7.50
Size, Inches	\$9.00	11.00	7/8 16.00	19.85	$\begin{smallmatrix}&&1\\25.20\end{smallmatrix}$
Size, Inches		1 1/4 \$37.00	$\frac{114}{50.00}$	$\frac{1 \%}{66.30}$	1 ½ 86.00

# BRASS BALLS

Non-Corrosive

Accurate within .0005 of an inch.

Size, Inches	, 60	.65	.80	1.00	1.55
Size, Inches	2.65	3/8 3.25	4.50	6.20	8.50
Size, Inches 5% Per 100 \$10.40	11	3/4	7/8	15	1

# STANDARD STEEL TAPER PINS



Taper 1/4 in. to the Foot. Price Per 100

Polished and Finished

Nos		00	0	1	2	3	4
Diam, at Large E	nd,						_
Inches	• • • • •	141	.156	.172	.193	.219	.250
Approx. Fractions	al				-		
Sizes, Inches		ď.	a'a	- 11	76	3/2	1/4
Length ½ in	s	1.80	1.80				
Length % in		1.80	1.80	2.00	2.10	2.30	2.50
Length 1 in		2.05	2.05	2.25	2.35	2.55	2.75
Length 14 in		2.30	2.30	2.50	2.60	2.80	3.00
Length 1 1/2 in	0.012		2.55	2.75	2.85	3.05	3.25
Length 1% in				3.00	3.10	3.30	3.50
Length 2 in	C - C - C - C - C - C - C - C - C - C -			*3.25	3.35	3.55	3.75
Length 2 1/4 in	200				*3.60	3.80	4.00
Length 2 ½ in					3.85	4.05	4.25
Length 2 % in						4.30	4.50
Length 3 in						*4.55	*4.70
Nos		5	6	7	8	9	10
Diam, at Large E	and.				-		
Inches		289	.341	.409	.492	.591	.706
T 11							
Approx. Fraction Sizes, Inches		52	11	13	1/2	12	12
Sizes, Inches	8)	12 3.00	hà	33	16	12	33
Sizes, Inches	s    <b>s</b>	3.00		33			33
Sizes, Inches	s    <b>s</b>	3.00 3.25					::::
Sizes, Inches  Length 1 in  Length 1¼ in  Length 1½ in	s s	3.00 3.25 3.50	3.50			:::::	
Sizes, Inches  Length 1 in  Length 1½ in  Length 1½ in  Length 1¾ in	s s	3.00 3.25 3.50 3.75	3.50 3.75 4.00				
Sizes, Inches  Length 1 in  Length 1½ in  Length 1½ in  Length 1¾ in  Length 2 in	s s	3.00 3.25 3.50	3.50 3.75				
Sizes, Inches  Length 1 in  Length 1½ in  Length 1¾ in  Length 2 in  Length 2¼ in	s  <b>s</b>	3.00 3.25 3.50 3.75 4.05 4.40	3.50 3.75 4.00 4.35 4.75	4.75 5.25	5.80 6.25		
Sizes, Inches  Length 1 in  Length 1½ in  Length 1¾ in  Length 2 in  Length 2¼ in  Length 2½ in	s)	3.00 3.25 3.50 3.75 4.05 4.40 4.75	3.50 3.75 4.00 4.35 4.75 5.20	4.75 5.25 5.75	5.80 6.25 6.75		
Sizes, Inches  Length 1 in  Length 1½ in  Length 1¾ in  Length 2 in  Length 2¼ in  Length 2½ in  Length 2½ in  Length 2½ in	s  s  s  s	3.00 3.25 3.50 3.75 4.05 4.40	3.50 3.75 4.00 4.35 4.75 5.20 5.70	4.75 5.25 5.75 6.25	5.80 6.25 6.75 7.25	9.80	
Sizes, Inches  Length 1 in  Length 1 ½ in  Length 1 ½ in  Length 2 ½ in  Length 3 in	s   s	3.00 3.25 3.50 3.75 4.05 4.40 4.75 5.10	3.50 3.75 4.00 4.35 4.75 5.20 5.70 6.25	4.75 5.25 5.75 6.25 6.75	5.80 6.25 6.75 7.25 7.80	9.80	
Sizes, Inches  Length 1 in  Length 1½ in  Length 1½ in  Length 2¼ in  Length 2¼ in  Length 2¼ in  Length 2¾ in  Length 3¼ in  Length 3 in  Length 3¼ in	S S	3.00 3.25 3.50 3.75 4.05 4.40 4.75 5.10	3.50 3.75 4.00 4.35 4.75 5.20 5.70	4.75 5.25 5.75 6.25	5.80 6.25 6.75 7.25 7.80 8.40	9.80 10.50 11.20	
Sizes, Inches  Length 1 in  Length 1½ in  Length 1½ in  Length 2¼ in  Length 2½ in  Length 2½ in  Length 3 in  Length 3 in  Length 3¼ in  Length 3¼ in  Length 3¼ in	S S	3.00 3.25 3.50 3.75 4.05 4.40 4.75 5.10 5.45	3.50 3.75 4.00 4.35 4.75 5.20 5.70 6.25 6.75 7.25	4.75 5.25 5.75 6.25 6.75 7.25 7.75	5.80 6.25 6.75 7.25 7.80 8.40 9.00	9.80 10.50 11.20 11.90	15.24
Sizes, Inches  Length 1 in  Length 1 ½ in  Length 1 ½ in  Length 2 ½ in  Length 2 ½ in  Length 2 ½ in  Length 2 ¾ in  Length 3 ¼ in  Length 3 ½ in  Length 3 ½ in  Length 3 ½ in  Length 3 ½ in  Length 3 ¾ in  Length 3 ¾ in	s)	3.00 3.25 3.50 3.75 4.05 4.40 4.75 5.10 5.45	3.50 3.75 4.00 4.35 4.75 5.20 5.70 6.25 6.75	4.75 5.25 5.75 6.25 6.75 7.25	5.80 6.25 6.75 7.25 7.80 8.40 9.00 9.60	9.80 10.50 11.20	15.24
Sizes, Inches  Length 1 in  Length 1 ½ in  Length 1 ½ in  Length 2 ½ in  Length 2 ½ in  Length 2 ½ in  Length 3 ¼ in  Length 4 in  Length 4 in	s	3.00 3.25 3.50 3.75 4.05 4.40 4.75 5.10 5.45	3.50 3.75 4.00 4.85 4.75 5.20 6.25 6.75 7.25 7.75	4.75 5.25 5.75 6.25 6.75 7.75 8.25	5.80 6.25 6.75 7.25 7.80 8.40 9.00 9.60	9.80 10.50 11.20 12.60 13.30	15.2: 16.2: 17.2:
Sizes, Inches  Length 1 in  Length 1½ in  Length 1½ in  Length 2½ in  Length 2½ in  Length 2½ in  Length 3½ in  Length 3¼ in  Length 3¼ in  Length 3¾ in  Length 3¾ in  Length 3¾ in  Length 3¾ in  Length 4¼ in	s s	3.00 3.25 3.50 3.75 4.05 4.40 4.75 5.10 5.45	3,50 3,75 4,00 4,85 4,75 5,20 5,70 6,25 6,75 7,25 7,75 8,25	4. 75 5. 25 5. 75 6. 25 7. 25 7. 75 8. 25 *8. 75	5.80 6.25 6.75 7.25 7.80 8.40 9.60 9.60 10.20	9.80 10.50 11.20 12.60 13.30	15.2: 16.2: 17.2: 18.2:
Sizes, Inches  Length 1 in  Length 1 ½ in  Length 1 ½ in  Length 1 ¼ in  Length 2 ¼ in  Length 2 ½ in  Length 2 ½ in  Length 3 ½ in  Length 3 ¼ in  Length 3 ¼ in  Length 3 ½ in  Length 4 ¼ in	s	3.00 3.25 3.50 3.75 4.05 4.40 4.75 5.10 5.45	3,50 3,75 4,00 4,35 4,75 5,20 5,70 6,25 6,75 7,25 7,75 *8,25	4.75 5.25 5.75 6.25 7.25 7.25 8.25 *8.75	5.80 6.25 6.75 7.25 7.80 8.40 9.00 9.60 10.20 10.80 11.40	9.80 10.50 11.90 12.60 13.30 14.00	15.2 16.2 17.2 18.2 19.2
Sizes, Inches  Length 1 in  Length 1 ¼ in  Length 1 ¼ in  Length 1 ½ in  Length 2 ¼ in  Length 2 ¼ in  Length 2 ¼ in  Length 3 ¼ in  Length 3 ¼ in  Length 3 ¼ in  Length 3 ¼ in  Length 4 ¼ in	s	3.00 3.25 3.50 3.75 4.05 4.40 4.75 5.10 5.45	3.50 3.75 4.00 4.35 4.75 5.20 5.70 6.25 6.75 7.25 7.75 *8.25	4.75 5.25 5.75 6.25 6.75 7.25 7.75 8.25 *8.75	5.80 6.25 6.75 7.25 7.80 9.00 9.60 10.20 10.80 11.40 12.00	9.80 10.50 11.20 12.60 13.30 14.00 14.70	15.2 16.2 17.2 18.2 19.2 20.2
Sizes, Inches  Length 1 in  Length 1 ¼ in  Length 1 ¼ in  Length 1 ½ in  Length 2 ¼ in  Length 2 ¼ in  Length 2 ¼ in  Length 3 ¼ in  Length 3 ¼ in  Length 3 ¼ in  Length 4 ¼ in  Length 4 ¼ in  Length 4 ¼ in  Length 4 ¼ in  Length 5 in  Length 5 in	s)	3.00 3.25 3.50 3.75 4.05 4.40 5.10 5.45	3.50 3.75 4.00 4.35 4.75 5.20 5.70 6.25 6.75 7.25 7.75 *8.25	4.75 5.25 5.75 6.25 6.75 7.25 7.75 8.25 *8.75	5.80 6.25 6.75 7.25 7.80 9.00 9.60 10.20 10.80 11.40 12.00	9.80 10.50 11.20 12.60 13.30 14.00 15.40 16.10	15.2 16.2 17.2 18.2 19.2 20.2 21.2
Sizes, Inches  Length 1 in  Length 1½ in  Length 1½ in  Length 2½ in  Length 2½ in  Length 2½ in  Length 3½ in  Length 3½ in  Length 3½ in  Length 4¼ in  Length 4¼ in  Length 4½ in  Length 5¼ in  Length 5¼ in	ss	3 .00 3 .25 3 .50 3 .75 4 .05 4 .40 4 .75 5 .10 5 .45	3.50 3.75 4.00 4.35 5.20 5.70 6.25 7.25 7.75 *8.25	4.75 5.25 5.75 6.25 6.75 7.25 7.75 8.25 *8.75	5.80 6.25 7.25 7.80 8.40 9.00 10.20 10.80 11.40 12.60	9.80 10.50 11.20 12.60 13.30 14.00 14.70 15.40 16.10 16.80	15 .2: 16 .2: 17 .2: 18 .2: 19 .2: 20 .2: 21 .2: 22 .2:
Sizes, Inches  Length 1 in  Length 1 ½ in  Length 1 ½ in  Length 2 ½ in  Length 2 ½ in  Length 2 ½ in  Length 3 ¼ in  Length 3 ¼ in  Length 3 ½ in  Length 3 ½ in  Length 4 ¼ in  Length 5 ¼ in	s)	3 .00 3 .25 3 .50 3 .75 4 .05 4 .40 4 .75 5 .10	3.50 3.75 4.00 4.35 5.20 5.70 6.25 6.75 7.25 *8.25	4.75 5.25 5.75 6.25 7.25 7.25 7.75 8.25 *8.75	5.80 6.25 6.75 7.25 7.80 8.40 9.60 10.20 10.80 11.40 12.60	9.80 10.50 11.20 12.60 13.30 14.00 15.40 16.10	15 2: 16 2: 17 2: 18 2: 19 2: 20 2: 21 2: 22 2: 23 2:

\*Pins Marked with \* are too long for use with Regular Taper Pin Reamers of Corresponding Numbers.

# WOODRUFF KEYS

ASSORTED



Per Assortment

#### SPRING COTTERS STANDARD

(Standard List Adopted October 5, 1922)



List Per 1000

Dia., In.	10	112	1/8	3 <sup>5</sup> 2 9	36	1/4	าซี	3/8	1/2	5%
Wire Ga.	16	13	11	9	7	4	1	31	19	39
Lgth. in.		7050000000	9000000							
14 34	\$0.33	\$0.33	\$0.45		TEFFERE	*******				
34	. 43	. 43	.58	\$0.93	\$1.25					
1	.53	.53	.70	1.10	1.55	\$2.80	84.26			
134	. 63	. 63	. 83	1.28	1.85	3.20	4.80			
1 16	. 73	. 73	.95	1.45	2.15	3.60	5.40	87.80		
134	.83	. 83	1.08	1.63	2.45	4.00	6.00			
2	. 93	.93	1.20	1.80	2.75	4.40	6.60	9.30	\$18.00	
234				2.00	3.05	4.80	7.10		4-0.00	
2 1/2	1.23	1.23	1.55	2.20	3.35	5.20	7.60	10.80	21.00	
3	1.53	1.53	1.90	2.60	3.95	5.90	8.60	12.30	24.00	840.00
3 1/2					4.55	6.60	9.60	13.80	27.00	45.00
4				3.80	5.15	7.30	10.60	15.30	30.00	50.00
5						8.70	12.60	18.30	35.00	58.00
6	12440.325.4333					10.10	14.60	21.30	40.00	66.00

All measurements made under the eye.

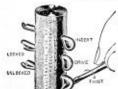
\$\delta\_1, \delta\_2, \delta\_3, \delta\_4, \delta\_4, \delta\_3, \delta\_2, \delta\_3, \delta\_4, \delta\_4, \delta\_4, \delta\_3, \delta\_2, \delta\_3, \delta\_4, \delta\_ or when required in sufficient quantities of a size to warrant being made up. These sizes will take the list of the next larger diameter.

Intermediate lengths take next longer list. Sizes longer than shown on list-add one and one-half times list differential for each unit of length or fraction thereof.

Prices apply to standard packages only-extra charge for other than standard packing.

# SELF-SPREADING SPRING COTTERS

CAMPBELL "HAMMER-LOCK"



Most economical and practical cotter pin on the market and especially adapted to quick repairs.

All operations done from the eye end. Easily removed and can be used several times.

Use Same List as Standard Spring Cotters Shown Above.

# BRASS SPRING COTTERS



Per 1000

Diam., In.	,	de	×				ď.	0					1	1/8	337				2000	50							à.			Ī			-	14		
36	\$2	. (	;4		7	,					,	į					ľ			,										j						:
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56 34	3	. 4	14											,			Ļ						į,							J,						
34	3	. 4	14		8	3		4	4				4	. 1	84	ı	ŀ		,		4 .		l.							d						,
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### SPRING COTTER ASSORTMENTS



CAMPBELL HAMMER-LOCK

Per Assortment Motor Assortment — Consists of 100 Pins, Assorted Sizes as Enumerated Below, Put Up in a Strong Pasteboard 

		Contents of	Assortment	
Size		Quantity		Quantity
			32 x 1 ½	
			1/8 X 1/2	
			½x1	
32X1	0.000	29	1/8 x1 1/2	6

# SPRING COTTER ASSORTMENTS



CAMPBELL HAMMERLOCK

Per Assortment Automobile Kit Assortment—Consists of 100 Pins, Assorted Sizes as Enumerated Below, Put Up in a Brass Screw Top Box, 

#### Contents of Assortment

Size									3	Q	u	a	n	tit	y	Size									(	c	u	a	nt	ity
$\frac{1}{10}X$	1/2				-			ă,	÷	,				1	7	3 x1 1	1/2								3	0			3	5
TEXT		4					÷	r	,					1	4	1/2 X	16		্			٠								8
TaX1	1/4					,									9	16 x 1		0	Ų.	0										12
32X1			,											2	9	16 x1	1/2						-		,		,			6

Per Assortment

Automobile Dealers' Assortment-Consists of 1000 Pins, Assorted Sizes Most Commonly Used. Put Up in a Strong Cardboard Box .....\$1.00



#### Contents of Assortment

Size	Quantity	Size	Quantity
70 X 1/2	100	ஃ x1 1/2	100
10X 34	100	1/4 X 3/4	50
16 X1		1/8 x1	60
16 X1 1/2		1/8 x 1 1/2	20
3 X 1/2	60	1/8 x2	20
33 X 34	100	%x1 1/2	20
3 x1	150	32 x 1 34	20



Per Assortment Garage Assortment — Consists of a Variety of 3000 Pins, Sizes Most Commonly Used by the Automobile Trade, Packed in a Strong Wooden Box.. \$3.00

#### Contents of Assortment

Size										Q	ľ	la	1.1	ntity	Size %x %									-	Q	u	a	ntity
78 X	1/2		,	,	,	4	ŝ							250	1/4 X 3/4													250
16 X	94				4				٠,				į.	250	1/6 X1													250
TeXL						٠.			٠.	٠.				250	16 x 1 1/4													100
Ye XI	34										3			250	A X 34													100
ng X	7/2				4									300	AX1 14	29		1										100
12X	34	-				i,					,			300	Ax1			0			Ġ	į,			i			50
32x1								4	١,					500	& x1 14		Ö	8	0	0	ô		Ċ	٥	i	ŝ	ै	50

## PORCH SWING SPRINGS RAYMOND "SWING EASY"



Finely Tempered Steel Wire, Japanned Per Pair No. R1-8 % in. Long, 113 in. Outside Diameter, 14 in. Wire, for Couch Hammocks and Heavy Wood No. R2-7% in. Long, 1% in. Outside Diameter, No. 5 Wire, for Wood, Fibre and Canvas Swings. . .

## Open Stock. BABY JUMPER SPRINGS



A symmetrical safety spring of extension type, with stop hooks inside of spring.

An "S" Hook is clamped to each end, which makes ad-

justment with any make of baby swing.

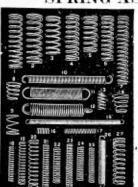
			Polished	Nickel	Each
No.	R5-	-Assembled	Complete One in a	Carton.	\$0 . 35

## EXTENSION SPRINGS



Each Open Stock.

## SPRING ASSORTMENTS



No. R48 Assartment

Per Assortment No. R48-Assortment Consists of 48 Springs of 27

Different Types and Ten-

This assortment includes steel, music wire, brass and phosphor bronze springs. A very complete assortment for the hardware store, machine or repair shop. Assortment con-tains springs for shop and household use such as automotive springs, washing machine springs, lock springs and many others.

One Assortment in a Box.



Complete Hardware Assortment

Per Assortment No. 519 Assortment-Consists of 519 Springs, 54 Sizes, Put Up in a 27x22x3 in. Olive Green Fin-ished Steel Compartment Box, with Labels, Handle and Indexed Folding Cover..........\$30.00 The result of a careful survey of the spring needs of the average hardware store.

## LOCK WASHERS NEVERSLIP

LOCK 

Sharp gripping teeth of metal project from both sides of the washer. These teeth firmly imbed themselves into the metal on both sides of washer.

Properly tempered to retain spring.

S. A. E. Light For S. A. E. Standard Bolts.

Size			Size		
Bolt,	Size Steel,	Per	Bolt.	Size Steel,	Per
In.	In.	1000	In.	In.	1000
200	16 X 61	\$1.35	16	72 X 1/8	\$21.35
1/4	64 X 76	2.70	5/8	13 X 5	23.70
20	1/8 X 3 2	5.00	12	1/4 X 1/8	26.70
3/8	1/8 X 3 2	5.70	3/4	1/4 X //6	46.00
16	1/2 X 1/8	8.35	7/8	11 x /h	53.00
1/2	11 x 1/8	10.35	1	76 X 1/4	77.00
		1000 in a	Disales	ret es	

Put up in Special Assortments-Refer to our Automobile Catalog.

#### STANDARD



Heavy, Posit	ive Pattern	
Bolt, Size, Inches 1/2	96 34 76	
Body Size, Inches 🖧 x 1/8	1/4 X //2 //2 X 1/4 //2 X 1/4	
Per 1000 \$20.00	55.60 103.20 110.40	
Bolt Size, Inches	1 134 135	
Body Size, Inches	3/8 x 1/4 3/6 x 1/4 3/6 x 3/6	
Per 1000	\$125 20 164 40 200 40	

Body Size, Inches			
Position Pattern, S.		ight	
Bolt Size, Inches	$_{32}^{3}\mathbf{X}_{64}^{3}$		% X/3 8.00
Bolt Size, Inches $\vec{r_e}$ Body Size, Inches $\vec{r_e}$ No. 40 Per 1000	11x10		5% 11x32 22.00
Bolt Size, Inches	1/4 X 1/8 \$36 . 40		$1 \\ \frac{\frac{5}{16}X\frac{1}{16}}{110.40}$

## WROUGHT WASHERS



Standard List U. S. Standard Sizes In 200 Pound Kegs

Outside Dia., In.	Size of Hole, In.	Thick. Wire Ga.	Size of Bolt, In.	Est. No. in 100 Lbs.	Per 100 Lbs.
16	1/4	18 (3)	n <sup>2</sup> la	39400	\$14.00
34	10	16 ( 10)	34	15600	12.20
7/8	3/8	16 (18)	vite.	11250	11.40
1	70	14(高)	36	6800	10.50
1 14	1/6	14 ( år )	70	4300	9.80
1 3/8	Par	12 ( 3 )	1,6	2600	9.40
1 1/2	5%	12 (3)	370	2250	9.30
1 %	11	10 (%)	56	1300	9.20
2	12	9 (4)	34	900	9.10
2 1/4	18	8 (11)	7/4	782	9.00
2 1/2	1 10	8 (11)	1	568	9.00
2 %	1 1/4	8 (11)	1 1/6	473	9.00
3	1 3/4	8 (11)	1 1/4	364	9.20
3 1/4	1 1/6	7 ( %)	1 34	275	9.20
3 1/2	1 %	7 ( 30)	1 1/2	256	9.20

## MALLEABLE IRON WASHERS





No. 10-Standard Pattern, with Nut Locking Feature For Bolt, In. 136 1/2 34 38 1 1 34 3 1/2 4 1/2 Diam., In... 3 6 Thick., In . . 68 Wt. 100, Lbs. 15 5.0 87 150 22 23 190 .. \$0.12 Per Pound, All Sizes. . Two Hundred Pounds in a Keg.

## CAST WASHERS



Ogee Pattern

For Bolt, Inches	12	98	34	7s	1
Diameter, Inches		2 34	3	3 1/2	4
Per 100 Pounds	\$8.00	8.00	8,00	8.09	8.00

## BRASS WASHERS



REGULAR

Small Pattern

Sz. Wash- er, Screw or Bolt	Outside Dia., In.	Inside Dia., In.	Thick., Inches	App. No in Lb.	Per Lb.
No. 3	14	.101	.020	4000	\$2.00
No. 4	200	.125	.025	2500	1.50
No. 6	34	.150	.032	1100	1.00
No. 8	34	.170	.032	1170	1.00
No. 10	3	.195	.036	760	.90
No. 12	16	.228	.040	525	.80
No. 14	9.	.260	.040	420	.80
No. 16	5/8	.285	.040	340	. 75
No. 18	11	5.	.051	230	. 75
No. 20	74	11	.064	150	.75
No. 24	7/8	.385	.064	110	.75

#### Large Pattern

No. 8	vin	.170	.036	725	\$0,90
No. 10	1/4	.195	.040	480	.80
No. 12	-th	.228	.040	380	.80
No. 14	11	.260	.051	210	.75
No. 16	3/4	. 285	.064	135	. 75
No. 18	7/8	de	.064	100	.75
No. 20	7/8	11	.064	103	.75
No. 24	1	.385	.081	64	.70

#### Bolt Sizes

3.	14	.195	.040	480	\$0.80
14	11	.260	.051	210	. 75
3,	7/4	4.5	.064	103	. 75
36	1	.385	.081	64	.70
Ser	1.0	1/2	.081	4.5	.70
1/2	1 %	70	.091	29	. 70
56	1 5%	14	.091	21	.70
34	2	13	.125	10	. 70
7/8	2 3/8	15	.144	6	. 70
1	2 1/2	1 10	.144	5 %	.70

## LEAD WASHERS



Make an absolutely Water Tight Joint on any surface, whether concave, convex or flat. Also prevent rust below nail head and head from cutting into sheet. One pound will put on 2 to 3 squares.

For Use with Sheet Iron Roofing and Siding

Per Pound To in. Diameter, As in. Hole, About 325 to Lb. \$0.30 5 Pounds in a Carton. 100 Pounds in a Case.



## RIVETING BURRS

Wrought Steel Tinned in 1 Lb. Boxes



Size	Outside Dia., In.	App. No.	Size	Gauge No.	Per Lb.
6	1/2	450	. 215	18	80.52
7	1/2	430	.188	18	. 53
8	1/2	420	.172	18	. 54
9	70	552	.157	18	. 55
10	1.0	637	.143	18	.57
11	36	740	.127	18	.60
1.9	34	722	115	1.8	70

## RIVETING BURRS



Annealed, No. 18 Gauge For Rivets, Inches..... Outside Diameter, Inches. . Per Pound .. Five Pounds in a Box.

in in.

### IRON RIVETS





Round Countersunk

Rom	id, Flat and	Counte	r-sink	Heads	in I	Bulk	
E	Annealed		List	of Ma	y 19	, 192	9
			Per Po	und in	200	Lb. K	egs
Length, Inc	hes	1/4	rle .	3/8	70	1/2	56
Diameter 1	s In	\$0.33	.32	.29			
Diameter &	In	.24	.23	.22	.21	.19	. 19
Diameter y	In	.23	.22	.21	.20	.18	.18
Diameter 3	In	.22	.21	.20	.20	.18	. 18
Diameter 1	In	.20	.20	.19	.19	.17	.17
Diameter A	In		.20	.18	.18 .	1616	.16 16
Diameter %				.18			.16
					21	to 8	34 to
Length, Inc	hes	94	76	1 to	2 3	16	6
Diameter 1/4	In 8	30.2114	.21 16	.21			
man at the same of	The second secon			AND THE REAL PROPERTY.			

Length, Inches	74	18	1 to 2	35 72	6
Diameter 1/8 In	\$0.211/2	.21 1/2	.21		
Diameter 32 In	.18 1/2	.181/2	.18		
Diameter 3 In	. 17 3/2	.17 %	.17	.20	.22
Diameter 3 In	.1736	.17 1/2	.17	.20	.22
Diameter ¼ In	.16 1/2	. 16 1/2	. 16	.18	. 19
Diameter A In	. 16	.16	.15 1/2	.17 16	.181/2
Diameter % In	. 15 1/2	. 15 1/2	.15	.17	.17

Advance for Quantity

100 lb. Kegs Add 1¢ to Above List. 50 lb. Boxes Add 3¢ to Above List. 25 lb. Boxes Add 4¢ to Above List,

5 or 10 lb. Boxes Add 5¢ to Above List. 1 lb. Boxes Add 8¢ to Above List.

Flat Head, Tinned Per Pound ...

56 34 Length, Inches . . . . 36 Diameter 76 In ...... Same Lists as Above Plus 6¢ Per Diameter 14 In . . . . . . . . . Lb. Net for Tinning.

## BOILER, SHIP AND STRUCTURAL RIVETS

Sizes, 1/2 inch Diameter and Larger In Kegs or Bags of 200 to 300 Pounds.

Boiler Rivets, Standard Heads, Structural Rivets, Standard Round or Button Heads, Ship Rivets, Straight Neck. 34 to 114 in. diameter. 2 to 5 in. length inclusive.

STANDARD EXTRAS Per 100	T.be
1-1/2 in. Diameter	
2—5% in Diameter	
3-16 in., 16 in., 18 in., 18 in., and 1 to in, subject to	.00
same diameter extra as nearest smaller diameter,	
plus 25¢ net per 100 lbs.	
4—Rivets Larger than 1 1/8 in. Diameter	.25
5-Lengths 1 in. and Shorter	.75
6-Lengths Longer than 1 in. Up to and Including	
	.25
2 in	
7—Lengths 5 in. and Longer	. 50
8—Swell Necks	. 25
9—Annealing Rivets for Cold Driving	. 50
10-Rivets Packed in 100 to 199 lb. Packages	.40
11-Reinforcing Kegs or Packing in Bags for Export,	
25c Net Extra Per Package.	
12-Packing in Boxes for Export, price on application.	
13-Cone or Button-head Boiler and Tank Rivets.	
Jones and lank hirets,	

Extra ......80.20 14-Steeple-head Rivets ...... 45 15-Countersunk Head Rivets...... 45 16—Bullhead Rivets ..... 70 17-Pan Head Rivets...... .45 18-Special shape or sized heads other than style

and standard above listed, price on application. 19—We prefer not to break kegs, but where necessary to ship less than 100 lbs. of a size, \$1.00 net extra will be added for each broken keg.

20-Cost of testing and inspection, if any, to be at customer's expense.

## TINNERS RIVETS



Black and Tinned Per 1000 in Packages,

Length  Market  And  And  And  And  And  And  And  An	80.28 .32 .36 .41 .45 .48 .54 .62	000	Tinned \$0.02 .0234 .0334 .0334 .0438 .05 .0634 .0736
82 82 70 10 10 10 10 10 10 10 10 10 10 10 10 10	.32 .36 .41 .45 .48 .54	000	. 02 34 . 03 34 . 03 34 . 04 34 . 05 . 06 34
다는 모든 성도 나는 자리 5월 모든 80일 등 모든 비를 되었다. 하나 모든 사람 보다 보다 되었다.	.72 .83 .96 1.09 1.20 1.30 1.75 2.00 2.20 2.40 2.64 3.08 3.52	Net Extra Per 10	08 % 10 12 % 15 17 % 20 25 30 35 40 45 50 60 70 80
	(10 144 - 71 1/8) tops one (10 1/8) tops one (10 1/8) tops	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- 83

\*Size Indicates Weight of 1000 Rivets in Pounds.

## TUBULAR RIVETS



No. 1J-Japanned, Diameter of Head 5/16 in., Diameter Body 9/64 in.
Packed in 50 and 100 Count Boxes.

racked in 50 and 100	Count .	Dozeos.	
Uniform Leng	ths		
Length, Inches 4/16	5/16	6/16	7/16
Boxes of 50 Per Dozen, \$1.36	1.42	1.47	1.51
Boxes of 100Per Dozen, 2.36	2.47	2.60	2.68
Length, Inches	8/16	9/16	10/16
Boxes of 50 Per Dozen		1.45	1.70
Boxes of 100 Per Dozen		2.91	3.02
Assorted Len	gths	Per Doze	n Boxes
3/16 to 1/2 in 50 in a Box			
3/16 to 1/2 in100 in a Box			. 2.53
20.20 A CO.C.			

BRASS No. 738—Diameter Body 9/64 in., Diameter Head 5/16 in. Uniform in Lengths, Packed in 100 and 1000 Count Boxes. 2.23 2.53 2.83 2.97 3.67 3.27

## BRASS JACKET RIVETS

Oval Head, ¼ in. 12 10 . 75 . 75

## SLOTTED CLINCH RIVETS

4/16 5/16 6/16 7/16



Actual Size of Rivets.

Cut Shows Rivet Clinched.

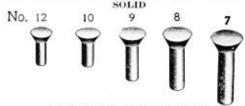
No. 1C-Coppered, 50 Rivets in a Box. Diameter of Head & in., Body & in. Length, Inches..... 4/16 5/16 7/16 Per Dozen Boxes.... \$1.02 1.02 1.06 1.09 Length, Inches..... 8/16 9/16 10/16 12/16 Per Dozen Boxes.... \$1.12 1.18 1.21 1.38 Assorted Lengths Per Dozen Boxes 4/16 to 1/2 in.— 50 in a Box......\$0.89 

### BRAKE BAND RIVETS BRASS CLINCH



A Hand Tool for holding rivets included with each box. No. 2970—Brass, & in. Diameter Body, 5 in. Diameter

Head, 100 in a Box or 1000 in a Box. 6/16 2.23 1.93 2.08 Boxes of 100...Per Dozen, 2.25 2.50 2.70 2.90 Length, Inches ..... 9/16 10/16 12/16 Per 1000 . ..... \$2.53 2.63 2.93 3.65 Boxes of 100...... Per Dozen, 3.20 3.35



### Solid Copper, in 1/2 Lb. Boxes

Nos.	Diam. Body. In.	Diam. Head, In.	Lengths, Inch	Per Pound
12	1/8	1/4	14. %, %, %, %	\$0.51
10	रीं ।	22	14, %, %, %	.52
9	22	ਜੌਕ	1/2 . 5/8 . 3/4 . 7/8	. 53
8	11	3/8	16, 34, 1	. 55
7	18	13	1/2, %, 1	.57
6	13	70	1	, 61

## COPPER RIVETS

Without Burrs







Flat Head. Oval Head. Countersunk Head. All Sizes in 1 Lb. Boxes Except those Marked with a (\*) which are in 5 Lb. Boxes.

Oval Head 

16 x1, 11/4, 11/2, 2

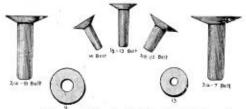
Countersunk Head

Per Pound.... . . . . . . . . . . . . . . . . . Prices on Application 4x ½, %, ¼, %, 1, 1¼, 1½, 1¾, 2 %x ¾, 7k, 1, \*1¼, \*1½, \*1¾, \*2 %x \* ¾, \*1, \*1¼, \*1½, \*1¾

Flat Head

. . . . Prices on Application %x1, 1%, 1%, 1%, 2

## COPPER BELT RIVETS AND BURRS



9.	
Rivets Only, in 1 Pound Boxes Per	Pound
No. 6-Length 1/2, 1/8, 1/4, 1/4, 1 1/2 in	.80.49
No. 7—Length ¼, %, ½, %, %, %, 1, 1¼, 1½ i	
No. 8—Length 14, 38, 12, 58, 34, 78, 1, 1 14, 1 1/2 in	n 50
No. 9—Length ¼, %, ½, %, ¾, %, 1, 1¼, 1½ is	n52
No. 10—Length 4. 36. 46. 56. 36. 36. 1. 146. 136 ii	n 54
No. 12—Length 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2 it	n58
No. 14—Length 1/4, 3/8, 1/2, 5/8, 5/4, 7/8, 1 in	65
Burrs Only, in 1 Pound Boxes	
Nos 4 5 6 7 8 9 10 1	12 14
Per Pound 80.49 .49 .49 .49 .50 .52 .54 .	
Rivets and Burrs, in 1 Pound Boxes Per	D
No. 4—Length 1, 11/4, 11/2 in	. \$0.49
No. 5—Length 1, 1¼, 1½ in	49
No. 6-Length 14, 36, 12, 56, 34, 76, 1, 114, 112 in	149
No. 7—Length 14, 38, 12, 58, 34, 38, 1, 114, 112 in	149
No. 8—Length ¼, %, ½, %, ¾, %, 1, 1¼, 1½ in	
No. 9—Length ¼, ¾, ½, ¾, ¾, ¼, 1, 1¼, 1½ ir	152
No. 10-Length 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2 in	154
No. 12—Length ¼, %, ½, %, ¾, %, 1 in	58
Assortments, in ¼ Lb. Boxes	
Nos	10
Size, Inches % to %	% to %
Nos	. 62
Assortments, in 16 Lb. Boxes	
Nos	10
Cina Trobas 3/ to 3/	% to %
Per Pound	, 60

# RIVETING MACHINES



## LEATHER BELTING



Made from carefully selected stock cut from choice parts of hide and specially treated.

## In 50 Foot Rolls

	Single I	ly			
Width, Inches	1/2	5%	34	36	1
Weight 100 Feet, Lbs.	4	5	6	7	8
Per Foot	80.12	. 15	. 18	.21	.24
Width, Inches	1 1/8	1 34	1 1/2	1 34	2
Weight 100 Feet, Lbs.	9	10	12	14	16
Per Foot	\$0.27	. 30	.36	.42	.48
	80.27	7.2	.36	.42	.48

ROUND

A proven serviceable belting for light drives. Made from oak tanned leather. Used on sewing machines, washing machines, shoe machines and various other purposes.

## 50 Feet on a Spool

Size, Inches	34	de	36	1/2
Wt. 1000 Feet, Lbs.	3 1/2	6	8	11
Per Foot	80.08	.12	.16	.26



## STEEL BELT LACING

ALLIGATOR



Alligator Steel Lacing is adapted for use on leather, rubber, Balata, cotton or canvas stitched belts of any width or thickness and will hold securely the size belt it is intended for.

The joint lasts long and saves repair. No punch holes, and a pull against the edge of steel teeth avoid weakening belt and add to its life.

Lacing is smooth on both sides of belt and can run in contact with an idler pulley or on serpentine drives. It can be used in all classes of service, light work or heavy duty on any kind of belting.

A perfect flexible joint made in any kind of belting on a 4 in. belt in three minutes.

Packed in boxes complete with gauge and hinge pins.

Will Loin

#### Cold Rolled Steel

Thickness

Nos.	Belt, Inches	Width, Inches	Section, Inches	Per Box
60	Up to 1	72	6	\$2.60
1	To to all	42	6	1.70
15	1/8 to 3/2	64	8	2.60
20	re to in	60	12	2.60
F25	de to de	4.8	8	2.50
G25	10 to 32	96	12	5.00
L27	1/4 to 1/2	96	12	5.30
M35	no to in	32	8	2.30
N35	32 to 18	4.8	12	3.40
U45	% to 3/8	48	12	4.50
W55	3/8 to 1/0	48	12	5.20
X65.	To to 1/2	4.8	12	6.00
75	½ to %	48	12	8.80
49.5	** ** * *			

Sizes Nos. 00, 1 and 15 are packed only with Rawhide Pins; Sizes Nos. 20, 25, 27, 35 and 45 are packed regularly with Rocker Pins but can be had with Rawhide Pins if so specified; Sizes Nos. 55, 65 and 75 are packed only with Section Steel Rocker Hinge Pins.

## In Handy Packages, with Gauge and Hinge Pins

	in Handy Fackages, with Gauge and Hinge Fins	
	Per Pack	tage
No	. 15-S-For Belts 1/8 to 1/2 in. Thick, Sufficient for	
	12 in. in Width, 6 in. Lengths	. 55
No	. 25-S-For Belts 7 to 32 in. Thick, Sufficient for	
		.70
No	. 27-S-For Belts 1/4 to 1/2 in. Thick, Sufficient for	
		. 75
No	. 35-S-For Belts 32 to 1/2 in. Thick, Sufficient for	
		.95
	Ten Packages in a Carton.	

## EXTRA HINGE PINS

# Can be Cut to Suit Requirements

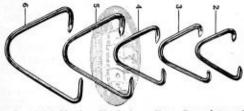
Por Lacing, Nos. 00 Length, Inches 6	Rawhide 1 6 6	15 8	20 & 25 8	12
Per Dozen	27 12	.60 \$\frac{5}{2} 35 8 .70	.60 **2 35 12 1.00	.90 16 45 12 1.20



		Sectional Steel Rocker Pins	Per Dozen
No.	25—For	Nos. 20 and 25 Lacing, 12 in. Long	80 90
No.	27-For	No. 27 Lacing, 12 in Long	1 00
No.	35-For	No. 35 Lacing, 12 in. Long	1 00
No.	45—For	No. 45 Lacing, 12 in Long	1 90
No.	65-For	Nos. 55 and 65 Lacing, 12 in Long	1 40
No.	75—For	No. 75 Lacing, 12 in. Long	1.70

## CLIPPER BELT HOOKS

Made from special steel wire tempered to combine great tensile strength with ability to withstand strain. Anyone with ordinary ability can make a perfect joint with the Clipper System of lacing. Both sides of belt are alike-perfectly smooth. Hooks having a long and short side. zig zag the lace thus equalizing the strain. Joint is flexible with no chance of crystallization if hooks are properly driven or pressed into belt flush with surface.



12 Car	ds of 84	Hooks,	Each	in a	Box,	Complete	with	14
	Twick	od Rawl	vide P	ine i	Eveer	or No. 1)	Thom	Descri

	111	isted i	rates in	ue II	ns (E	ceebe wo	Pe	r Box
*No.	1-For	Thin 1	Belts	Over	Small	Pulley	8	\$0.80
No.	2-For	Thin	Belts	Over	Small	Sized F	ulleys	.80
	3-For							
	4-For							
No.	5-For	Belts	Not (	Over	% in.	Thick		1.00
	6-For							
	Sufficient							
midt	h 80 in	giving	e a i	oint 1	whose	smoothr	oss elim	inates

width 80 in., giving a joint whose smoothness eliminate all vibration. \*No. 1 Hooks are carded in 6 in. lengths, 20 cards to

## the box, sufficient for lacing 34 2-in, or 77 1-in, belts. OF THE PARTY OF TH

"Fac Simile" of Card of 84 Hooks, All Ready to Slip Into Lacer

With a pair of scissors, with which each lacer is equipped, the cards can be cut to suit the belt to be laced. Cut one edge of card, then the other, and bend slightly back and cut through the center. This can be done without displacing any of the hooks.

#### LACE PINS



Twiste	d Ra	which	le, 12	in.	Lon	g		Pe	31	Bundle
No. 13-Diameter 3	in.,	for	Hook	Nos.	1,	2	at	ıd	3	.80.70
No. 12-Diameter 2	in.,	for	Hook	No.	4.					70
No. 11-Diameter 1/2	in.,	for	Hook	No.	5.					70
No. 10-Diameter &	in	for	Hook	No.	5 .					80
No. 9-Diameter	in.,	for	Hook	No.	6.					90
No. 8-Diameter &	in.,	for	Hook	No.	6.					. 1.00
No. 7-Diameter	in.,	for	Heav	y Be	lt					. 1.20
No. 5-Diameter	in.,	for	Heav;	y Be	lt					. 1.60
Assorted-13, 12, 11	, 10,	9, 8				.,				75

## Fibro Waterproof, 12 in. Long

Nos	13-F	12-F	11-F	10-F
Per Bundle		.35	. 35	.40
Nos	9-F	8-F	7-F	5-F
Per Bundle	80.45	.50	. 60	.70
				Bundle
Assorted-13-F, 12-F, 1	1-F, 10-F,	9-F and	8-F	,\$0.40

CROSS SECTION OF EMBEDDED HOOK



Twenty-four in a Bundle.

The secret of the success of "Clipper" Hooks lies in their design and the manner in which one hook is placed behind the other as shown above. While a powerful grip is thus assured, no belting fibres are cut or injured. The belt is not weakened at the joint.

## CLIPPER BELT LACERS



Makes a flexible lacing and saves time and money. Laces a 6 in. belt in three minutes. This lacer makes it unnecessary to remove the belt. Adapted to all makes of belting and will accommodate any thickness of belt.

Cast Iron Body, Steel Faced, All Working Parts Tempered and Case Hardened

No. 3-6 in. Wide, Operated by Two 9 in. Lever Handles, Laces Any Width or Thickness, Uses Hooks Nos. 2 to 6 Only, Weight Each 24 Lbs. . \$25.00 One in a Box.

## JUNIOR



Steel Frame and Working Parts

No. 1-For Belts Up to 2 in. Wide, No. 1 Clipper Hooks Only Can be Used in This Lacer, Especially Adapted for Use in Textile Mills, Watch and Clock Factories, Garages, etc., Weight One in a Box.

### NEW BABY

Cast Steel Faced

No. 0—4 in., Laces Any Width and Thickness Up to 4 in. Wide and % in. Thick in One Operation, Uses Hooks Nos. 2 to 6 Only, Sets in a Vise, Works Quick-ly and Right, Little

vise is handy.

but Handy ...... \$3.50 Convenient for use in tool room or any place where a



#### BABY JUNIOR

Cast Steel Faced

Each

No. 101-Vise Lacer, Similar in Style to No. 0, But with the Same Properties as the No. 1 Junior, Laces Belts Up to 2 in., Uses No. 1 Clipper Hooks Only ......\$2.50

## CLIPPER BELT CUTTERS



A tool for cutting belting from the roll as well as for squaring belt ends preparatory to lacing them.

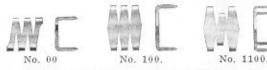
Belts which are squared with the Clipper Belt Cutter will not cause any strain on any part of your belting fibre or lacing. Workmanship and material fully guaranteed.

Open End Each 

Stationary End No. SC ...... 12.00

## STEEL BELT LACING

BRISTOL PATENT



### Cold Rolled Steel, Smooth and Elastic Joints

Requires no special tools, does not cut belt fibres, each box contains enough to lace 100 inches in belt width.

#### For Leather Belts



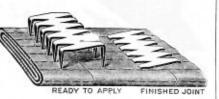
Use No. 00 for Split Leather and Extra Light Belts, No. 0 for Split Leather and Light Belts, No. 1 for Ordinary Single Leather Belts, No. 2 for Ex-

tra Heavy and Wide Single Belts, No. 3 for Double Leather Belts, No. 4 for Heavy Double Leather Belts and No. 5 for Extra Heavy Double

Leather Derts.				
Nos		0	1	2
Thickness Belt, Inches. 1/4	3-1/8	1/8-16	3n - 34	14-16
Weight Per Box, Lbs.	3/4	5/8	1	2
Per Box		2.50	1.50	2.00
Nos		3	4	5
Thickness Belt, Inches		$\sqrt{s} - \frac{3}{2}$	36-70	$\frac{7}{16} - \frac{9}{16}$
Weight Per Box, Lbs		2.34	3 1/2	4 3/4
Per Box		\$2.50	3.00	3.50
100 Inches, Asso	rted Le	ngths, in	a Box.	

#### For Woven Belts

Use No. 100 for Lightest, No. 10 for Two-Ply, No. 11 for Three-ply, No. 12 for Four-Ply, No. 13 for Five-ply, No. 14 for Six-ply, No. 15 for Seven-ply.



No. 17 for Eight-ply and Extra Double Heavy Rubber and Cotton Belts, No. 19 for Ten-ply and Extra Heavy Conveyor Belts.

Nos	12	13	14
Thickness Belt, Inches	$\frac{1}{4} - \frac{1}{10}$	14-36	3/6 - 1/6
Weight Per Box, Lbs	2 34	4	5
Per Box	\$2.00	2.50	3.00

100 Inches, Assorted Lengths, in a Box.



#### For Leather, Woven and Rubber Belts

Use No. 1100 for Split Leather and Lightest Rubber and Cotton, No. 110 for

Split Leather and Light Rubber and Cotton, No. 110 1/2 for Ordinary Single Leather and Two-ply Rubber and Cotton, No. 111 for Ordinary Single Leather, and Three-ply Rubber and Cotton, No. 112 for Extra Heavy and Wide Single Leather and Four-ply Rubber and Cotton, No. 113 for Double Leather and Five-ply Rubber and Cotton, No. 114 for Heavy Double Leather and Six-ply Rubber and Cotton, No. 115 for Extra Heavy Double Leather and Seven-ply Rubber and Cotton, No. 117 for Conveyor Belt and Eightply Rubber and Cotton, for Ten-ply and Extra Heavy Convevor.

Nos	56	111 34-14 1 1/2	$112$ $\frac{1}{4} - \frac{1}{14}$ $2\frac{1}{2}$
Per Box	\$2.50	1.50	2.00
Nos	113 -15-36 3 16 \$2.50	114 % - 7 <sub>4</sub> 4 7 <sub>8</sub> 3 . 00	$\begin{array}{c} 115 \\ \frac{7}{16} - \frac{9}{12} \\ 5 \frac{1}{2} \\ 3 . 50 \end{array}$

100 Inches, Assorted Lengths, in a Box.

## BELT LACING



Assorted Lengths, 100 Feet in a Bundle Width, Inches ..... Per Bundle ..... \$2.50 3.00 3.75 4.50 5.50Width, Inches ...... 1 Per Bundle ..... \$6.50 7.50 9.50 11.00

#### WIRE

## Malin's Composition

Leaves a joint no thicker than any other part of the belt, eliminating extra strain at this point.

			50	Fee	et o	n a	Spool			I	?€	T	1	. 0	0 B	reet	
No.	00-For	Belts	1/2	to	1	in.	Wide.		 						. 82	. 00	
No.	0-For	Belts	1	to	2	in.	Wide.		 						. 2	.00	
No.	1—For	Belts	2	to	6	in.	Wide.								. 2	.00	
No.	2—For	Belts	6	to	20	in.	Wide.		 						. 2	.00	
	3-For																
							Conton										

# BELT HOOKS



1	Bright S	teel			
Nos	2 ½ 100	2 2 ½ ½ 100 1.80	$ \begin{array}{c} 3 \\ 2\frac{1}{2} \\ 100 \\ 1.40 \end{array} $	$2\frac{5}{18}$ $100$ $1.20$	$ \begin{array}{c} 5 \\ 2\frac{1}{32} \\ 100 \\ 1.00 \end{array} $
Nos	1 % 200	7 1 % 200 .55	8 1 ½ 200 .45	9 1 1/8 300 . 36	$10$ $1\frac{1}{32}$ $300$ $.32$
Nos. Length Inside, Inches. Quantity in a Box Per 100	33 500	12 81 500 .25	13 ¾ 500 .23	14 38 500 .21	15 11 500 .18

## BELT STUDS OR FASTENERS BLAKE IMPROVED

Solid Brass, Can be Used Over and Over

The most practical Fastener made for Leather, or Rubber Belts Running at Very High Speed. Use No. 3 for Light Belts, No. 2 for Medium Heft Belts, No. 1 for Ordinary or Heavy Single Belts, No. 0 for Leather Double and Heavy Rubber Belts, No. 00 Heaviest Belts. 100 in a Box.

2 1 0 Nos. 00 Length, Inches ..... Weight Per 100 Lbs.. 16 1 1/2 \$0.90 1.25 1.65 2.00 2.50

## BELT COUPLINGS



To Connect Round Belts. Sizes Given are Belt Diameters. Size, Inches 1/4 Per Dozen Pairs, \$3.00 2.50 2.50 2.50 3.00 4.00 One Dozen in a Box.

## BAR SOLDER

## WARRANTED HALF AND HALF

Per Pound 1¼ Pound Bars No. 5050-Highest Grade, Warranted 50% Tin and 50% Lead .

## TINKERS SOLDER

### TINKER'S SOLDER

A Small Bar of Good Grade Solder for Tinners' Use. Per Pound Tinker's Solder-Length of Bar 6 in., Weight Per 

## ALUMINUM SOLDER

## SUPREME BRAND ALUMINUM SOLDER THE TEST TELLS" OPERATIONS FOR USING ( has proven the extreme durable ity of Supremo Breek The proving one of phonone on of selection is each that every THAL SEE RENT-LASHER CO., Inc. -

SUPREME BRAND

Will Solder Aluminum in All Forms

Used in foundries, pattern shops, automobile factories, garages. repair shops, sheet metal works, etc., and in the household for mending aluminum utensils.

Per Card No. 1-Consists of 12 1-Oz. Bars, Trial Size, Mounted on an Attractive Display Card. 

No. ½-1/2 Lb. Bars. ..... Each, ....

Open Stock. "NOFLUX"

Solders Aluminum to Aluminum

"Noflux" Aluminum Solder can be used by anyone with an ordinary clean soldering iron, blow-pipe, or gasoline torch, and without flux, the part soldered will be and re-main stronger than the metal solder, and the solder will not disintegrate, nor will it be separated by electricity. Each

### WIRE SOLDER KESTER ACID-CORE



16 in. Diameter, About 30 ft. to the Pound

1 Nos. Size Spool, Lbs..... ..... \$0.75 .70 Per Pound .

Kester Acid Core Wire Solder is self-fluxing. The solder (strictly tin and lead) is a hollow wire filled with a soldering flux in a series of cells or pockets. No additional flux is required, as the solder is melted off, just the proper amount of flux is released to insure a perfect bond.



#### STANDARD

Warranted Half and Half, 50% Tin and 50% Lead

For Electrical Purposes, Household and Automobile Use. Per Pound 

5, 10 and 50 Pound Spools.

## SILVER SOLDER



Silver Solder is used where a particularly strong joint is needed or where the joint is to be subjected to considerable heat.

For brazing band saws, etc.

34 in. Wide

Per Ounce 1 Gunce Box . . . . . . . . . . . . . . . \$1.60

## BABBITT METAL MAGNOLIA



Cheaper and better than "Genuine" Babbitt, Never runs hot or cuts a shaft. Does not "break up." Used on all bearings, metallic packing, etc. Per Pound Magnolia-Anti-Friction, Weight of Bar About 6

Lbs. ..... Market



A low grade Babbitt Metal for slow speeds and light pressures; made to standard formula for this grade; 91% Lead, 9% Antimony. Per Pound

No. 4-Five Piece Bars, Weight About 7 Lbs., About 

## SPELTER SOLDER



.80.50

For brazing copper, brass, steel and cast iron. Can be absolutely relied upon for free flowing and strength of seam.

Fine Round Grain, Free Flowing Per Pound

## 



Used by Tinsmiths, Roofers and Tinkers in soldering joints, as a flux to make the solder flow, and by Varnish Makers as a gum, in cheap varnishes.

No. R-Lump In Casks, About 500 Pounds.

## SOLDERING SALTS

## YAGER

#### The Original Yager's Twice Improved

A chemically pure flux in the form of a dry salt, made of the purest raw materials which makes the best flux for soldering tin, copper, brass, iron or steel, one to the other. It makes the joints stronger than the metal. Can be used in any climate or weather.

Size	Can,	Lbs			÷							1/2
	Pound											\$1.20

1.00

## SOLDERING COMPOUND



#### REDUCTO

Will tin a soldering iron, pipe and bolts.

Solders black iron, rusty metal, stainless steel, galvanized iron, brass and copper without filing, cleaning or the use of acids.

Good for home use.

Size Can	 1 lb.	2 oz.
Each	 \$0.75	. 25

## SOLDERING PASTE

#### OAKWOOD

Made of highest chemicals, and is most attractively and conveniently boxed. Unequalled for general use.

Oakwood Soldering Paste is used and endorsed by thousands in various trades.



			-	111111111111111111111111111111111111111	
Size	Can, Oz	2	4	8	16
Per	Dozen	\$3.00	4.80	8.40	12.00

2 to 8 Ounce Cans, One Dozen; 1 Pound Cans, One-half Dozen in a Carton.

## WELDING COMPOUND

E-Z



Adheres to the metal at low heat, and is equally good for "Lap," "Split," "Butt" or "Jump" Welding. Enables the smith to weld Tool, Plow, Open Hearth and Bessemer Steel at 250° lower heat than any other compound, besides making stronger and smoother welds. steel as easily as iron

Size Per	Boxes, Pound	Lb	s .					81	0	5	3				1	3			80	2	5 2			50 12
Size	Drum,	Lbs	8.0		,	-					á	×											10	
Per .	Pound .												,	-								80	.11	34

## COTTON WASTE

Fine Long Thread, Machine Cop, Superior Quality, clean and free from knots and lumps.





W.	hite Ca	yuga			
Size Bale, Lbs	5	10	25	50	100
Best Grade Per Pound,					
Med. Grade Per Pound.					

White, Auto Pak One Pound Bales . . . 

## SOLDERALL



A Metal in a collapsible tube for soldering all Metals, except Aluminum. No Flux is required. 50 per cent tin and 50 per cent lead.

Takes less heat than bar or wire solder. No soldering outfit necessary. Per Dozen

Solderall-Put Up in Metal Tubes Containing Enough for About 50 Mends..... One Dozen in a Display Box.

## CEMENT



## DITMANS EVER-READY

Always ready for use, transparent, colorless, will match any color, heat and fire-proof. Can be used for lamp globes and chimneys. Mends everything, glass, china. metal, wood, rubber, marble, ivory, leather, etc.

Per Dozen

Ditman's Ever-Ready-In %x3 in. Self-sealing Collapsible Tubes, Easy to Apply, no Brush or Stick 

One Dozen Tubes on a Display Card.

## IRON CEMENT SMOOTH-ON, POWDER FORM

In Blue Labeled Cans



Sold in powder form, applied as a putty by mixing water, then becomes hard like iron.

Some uses-Repairing leaks or breaks in iron or steel castings, making hot or cold joints, stopping leaks of steam, water, fire, oil or gas in boilers, furnaces, stoves, radiators, pipes, tanks, water jackets, etc. Used on iron, steel, brass, copper, aluminum, wood, etc.

### No. 1 Onials Handening

No. 1-	-Amer u	ardening		
Size of Cans, Lbs	1	5	10	25
Cans in Case	60	12	6	
Weight Per Case, Lbs	7.9	72	79	25
Per Pound	\$0.60	. 50	. 50	. 50
No. 2-	-Slow Ha	rdening		
Size of Cans, Lbs	1	5	10	25
Per Pound	80.60	. 50	. 50	.50

#### SMOOTH-ON, PASTE FORM

#### In Gray Labeled Cans

An Elastic Iron Cement made and sold in paste form, ready for use. Some uses— Making screw-thread joints, coating gaskets, painting boiler seams, etc. For boiler patch compound, use by mixing with Smooth-On Iron Cement No. 1. Apply as a paint, paste or putty,



No. 3-For Screw Thread and Gasket Joints

Size of Cans, Lbs	1	5	10
Cans in Case	60	12	6
Weight Per Case, Lbs	75	74	75
Per Pound	\$0.50	. 50	50

## "SURE-GRIP" GLUE

#### An Animal, Not a Liquid Glue

A First Quality, High Grade Hide Glue ready for use when warmed. It is not affected by dry heat or any other atmospheric conditions.

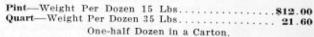
Will not dry up in the can and will not deteriorate in any way.

Is most economical, sets quickly, and will not injure a varnished surface.



Household Size - Weight Per Dozen 4 1/2 Lbs......\$3.00

One Dozen in a Counter Display Carton.





## LIQUID GLUE

#### LE PAGE'S

The recognized standard for adhesives the world over. For convenience and strength it stands supreme.



#### Family Size

Per Dozen

No. 27—In Patent Self-Sealing Tubes. ¾ x4 in., with Patent Plug Seal Spreader Attachment, No Waste, No Dirt, Weight Per Dozen 1½ Lbs......\$2.40

One in a Carton, One Dozen in a Display Box.



#### Family Size

Per Dozen

No. 25—Small Bottles,
with Patent Cap and
Spreader, Weight Per
Dozen 2½ Lbs....\$2.40

No. 30—1 Gill Cans,
with Friction Top
Cover and Spreader,
Weight Per Dozen
5½ Lbs.....3.60
One Dozen in a Box.



No. 25.

Nos. 30 to 33.

#### Mechanics Size

## In Patented Top Tin Cans

Nos	31	32	33	35
Capacity Can	½ Pt.	1 Pt.	1 Qt.	1 Gal.
Weight Dozen, Lbs			3.5	144
Per Dozen	\$6.00	10.20	18.00	54.00

No. 31, Two Dozen; Nos. 32 and 33 One Dozen; No. 35 One-half Dozen in a Case.

### DRY GLUE

## GLOUCESTER SHEET No. 1122

An excellent sheet glue of imported quality, adapted to cabinet making, pattern making and all wood jointing.

Will take 1 to 1½ parts of cold water to 1 part of glue and make a strong permanent joint.

In Bulk, Per Pound......\$0.30

### FLAKE No. 1282

#### GROUND No. 1226

Light in color, sweet in odor and will not cake during warm weather. Adapted to sizing walls and woodwork. Known for its excellent water-taking quality.

## NOODLE No. 4035

# FISH GLUE



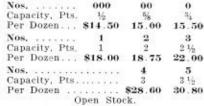
Used for manufacturing purposes in connection with shoes and articles of a similar nature. Not used so extensively on woodwork.

## GLUE POTS

CAST IRON

Strong Wire Bails

Two Parts, Painted Black Outside, White Enamel Lined Nos. . . . . . . 000 00 0



## CARBORUNDUM GRAIN



## In 1 and 5 Lb. Tin Cans

There is no Abrasive equal to Carborundum for cutting and producing a clean, sharp edge or surface. There are many uses for grain for grinding purposes.

Graded by passing through a sieve same as emery.

## CARBORUNDUM POWDER

In 1 and 5 Pound Tin Cans

Powders are the grain too fine to size by ordinary sieving. They are graded by floating in water.

Grades F, FF, FFF.

## EMERY PURE TURKISH









Used by wood and metal workers for polishing and buffing. Numbers designate the size of grain which corresponds to the mesh of screen it will pass through.

 Coarse Grain
 30
 40
 50

 Per Lb., in 75 Lb. Kegs
 \$0.15
 .15
 .15

15.90

17.85 20.40

## FLINT PAPER

MAPBRAND IN SHEETS



Wt. Ream,	Per
Lbs.	Ream
17	\$ 7.50
17	7.50
18	7.50
19	7.50
22	7.95
27	9.00
35	10.50
42	12.15
53	13.95
	Lbs. 17 17 18 19 22 27 35 42

9x11 Inches

480 Sheets in a Ream.

## MAPBRAND IN NEATPAK BOXES No Waste, Saves Time, Less Handling

31/2

Mapbrand Flint Papers and Emery Cloth are now offered in Neatpak boxes embracing

the following features: 1—Neatpak boxes are strong, cardboard boxes giving complete protection to merchandise while in transit or in dealer's stock.

2-Priced by the 100 sheets based on suggested resale prices makes easy figuring of costs and profits.

3—Makes attractive shelf display of mer-chandise, the special drawer-like box interior making every sheet

instantly available without disturbing shelf arrangement. A great convenience to the dealer.

#### U. S. FLINT PAPER 9x11

Grit	Sheets	Per 100	Grit	Sheets	Per 100
No.	Per Box	Sheets	No.	Per Box	Sheets
00	100	\$2.25	1 1/2	50	\$3.20
0	100	2.25	2	50	3.70
1/2	100	2.40	21/2	50	4.25
1	75	2.75	3	25	4.85

#### U. S. EMERY CLOTH 9v11

Grit	Sheets	Per 100	Grit	Sheets	Per 100
No.	Per Box	Sheets	No.	Per Box	Sheets
00	75	\$13.30	1 1/2	50	\$15.30
0	75	13.30	2	5.0	16.30
14	75	13.90	216	25	17.60
1/2	5.0	14.60	3	25	18.90

#### "HANDY PACKAGE" FLINT



Per Dozen Packages "Handy Package"-Consists of 20 Sheets of Flint Sand Paper, Practical Assortment of Grits in a 4%x 5¼ in. Size Handy for the Dealer and User . . . . \$2.00

Six Dozen Packages in a Carton.

## FLINT PAPER

IN ROLLS



Extra Quality

Rolls 5	0 Yard	s Long	:				Pe	r Roll
Width	Nos. 3/0	No.	No.	No.	No.	No.	No.	No.
Inches	2/0	0	36	1	1 1/2	2	21/2	8
1/2	\$0.67	\$0.72	\$0.80	\$0.88	80.97	\$1.06	\$1.15	\$1.25
1	1.15	1.25	1.40	1.55	1.75	1.90	2.10	2.30
1 1/2	1.60	1.75	2.00	2.25	2.51	2.80	3.05	3.35
2	2.10	2.30	2.60	2.95	3.30	3.65	4.00	4.40
2 1/2	2.55	2.80	3.20	3.60	4.05	4.50	4.95	5.45
3	3.05	3 35	3.80	4.30	4.85	5.40	5.95	6.50
3 1/2	3.50	3.85	4.40	5.00	5.60	6.25	6.90	7.55
4	4.00	4.40	5.00	5.65	6.40	7.10	7.85	8.60
5	4.95	5.40	6.20	7.05	7.90	8.85	9.75	10.70
6	5.90	6.45	7,40	8.40	9.45	10.55	11.65	12.80
7	6.85	7.50	8.60	9.75	11.00	12.30	13.55	14.85

#### 8.60 0.70 2.80 7.80 8.55 9.85 11.15 12.55 14.05 15.50 16.95 9.60 | 11.05 | 12.50 | 14.10 | 15.75 | 17.40 | 19.05 9.70 10.65 12.25 13.85 15.65 17.50 19.30 21.15 12 11.60 12.70 14.65 16.60 18.70 20.95 23.10 25.35 $\begin{array}{c} 13.4514.8017.0519.3521.8024.4026.9529.55\\ 14.4015.8518.25120.7023.3526.1528.8531.65\\ 15.3516.9019.45122.0524.9027.8530.7533.75 \end{array}$ 14 15 16 17,25 19,00 21,85 24,80 28,00 31,30 34,60 37,90 18 20 19.15 21.10 24.30 27.55 31.10 34.80 38.40 42.10 24 20.50 22.70 26.30 30.00 34.00 38.20 42.30 46.50 23.40|25.80|29.70|33.70|38.00|42.55|47.00|51.55 26 $\begin{smallmatrix}24 & 25 & 26 & 75 & 30 & 80 & 34 & 95 & 39 & 45 & 44 & 15 & 48 & 80 & 53 & 50 \\25 & 60 & 28 & 35 & 32 & 85 & 37 & 50 & 42 & 50 & 47 & 75 & 52 & 85 & 58 & 10\end{smallmatrix}$ 27 30 31 27.70|30.50|35.20|39.95|45.10|50.55|55.85|61.30 26 30.75 34.05 39.45 45.00 51.00 57.30 63.45 69.75

## EMERY PAPER MAPBRAND IN SHEETS



	0.		
	Wt. Re	am,	Per
No.	Lbs		Ream
000	24		\$10.00
00	24		10.00
0	24		10.00
1/2	29		10.80
1	37		11.90
1 1/2	41		13.60
2	4.4		15.70
216	46		18.00
3	56		20.50
4:	80 Sheets	in a	Ream.

## GARNET PAPER MAPBRAND IN SHEETS

9x11 in. Nos. . . . . . . . . . 000 Wt. Ream, Lbs. 19 00 26 Per Ream . . . . . \$22.50 22.50 Nos. 0 16 Wt. Ream, Lbs. 29 40 Per Ream....\$25.00 29.00 11/2 Wt. Ream, Lbs. 51 61 Per Ream . . . . . \$33.00 37:50 Nos. . . . . . . . 2 236 7.0 Wt. Ream, Lbs. Per Ream .... \$42.00 46.50



91

Nos. Weight Ream, Lbs..... 83 . . 851.20 56.30

## GARNET PAPER

IN ROLLS



### Rolls 50 Yards Long

Per Roll

Width	Nos.     3/0	No.	No.	No.	No.	No.	No.	No.
Inches	-2/0	0	16	1	11/2	2	2.35	3
1/2	\$0.67	.72	. 80]	.88	.97	1.06	1.15	1.2
1	1.15	1.25	1.40	1.55	1.75	1.90	2.10	2.3
11/2	1.60	1.75	2.00	2.25	2.50	2.80	3.05	3.3
2	2.10	2.30	2.60	2.95	3.30	3.65	4.00	4.4
2 1/2	2.55	2.80	3.20	3.60	4.05	4.50	4.95	5.4
3	3.05	3.35	3.80	4.30	4.85	5.40	5.95	6.5
3 1/2	3.50	3.85	4.40	5.00	5.60	6.25	6.90	7.5
5	4.00	4.40	5.00	5.65	6.40	7.10	7.85	8.6
6	4.95 5.90	5.40 6.45	6.20 7.40	7.05 8.40	7.90 9.45	8.85	11.65	12.8
7	6.85	7.50 8.55	8.60 9.85	9.75	11.00	12.30	13.55 15.50	14.8
8 9	8.75	9.60	11.05	12.50	14.10	15.75	17.40	19.0
10	9.70	10.65	12.25	13.85	15.65	17.50	19.30	21.1
12	11.60	12.70	14.65	16.60	18.70	20.95	23.10	25.3
14	13.45	14.80	17.051	19.35	21.80	24.40	26.95	29.5
15	14.40	15.85	18.25	20.70	23.35	26.15	28.85	31.6
16	15.35	16.90	19.45	22.05	24.90	27.85	30.75	33.7
18	17.25	19.00	21.85	24.80	28.00	31.30	34.60	37.9
20	19.15	21.10	24.30	27.55	31.10	34.80	38.40	42.1
24	20.50	22.70	26.30	30.00	34.00	38.20	42.30	46.5
26	23,40	25.80	29.70	33.70	38.00	42.55	47,00	51.5
27	24.25	26.75	30.80	34.95	39,45	44.15	48,80	53.5
30	25.60	28.35	32.85	37.50	42.50	47.75 50.55	52.85 55.85	58.1 61.3
		_						
36	30.75	34.05	39.45	45.00	51.00	57.30 63.70	70.50	69.7
40	34.15	37.85	48.85	50.00 52.50	56.70 59.50	66.85	74.00	81.4
42	38,80	42.80	49.40	56.20	63.50	71.20	78.85	86.4
44	41.00	45.40	52.60	60.00	68.00	76.40	84.60	93.0

## GARNET CLOTH

IN ROLLS

Rolls 50 Yards Long

Per Roll

Width	Nos.   4/0	No.	No.	No.	No.	No.	No.	No.
Inches	-2/0	0	36	1	11/6	2	21/2	3
16	8 1.30	1.40	1.50	1.60	1.70	1.80	1.90	2.00
11/4	3.55	2.55	2.80	2.95	3.15 4.65	3.40 5.00	3.60 5.30	5.6
2 72	4.70	4.95	5.35	5.70	6.10	6.55	7.00	7.5
21/2	5.80	6.15	6.65	7.10	7.60	8.15	8.75	9.30
3	8.05	7.30 8.50	7.95	8.45 9.85	9.05	9.75	10.45	11.1
3 1/2	9.15	9.70	10.50	11.25	12.00	12.95	13.85	14.8
5	111.40	12.05	13.10	14.00	15.00	16.15	17.25	18.4
6 7	13.65	14.45	15.65	16.75	17.95	19.30	24.10	22.0
8	15.90	16.80 19.20	18.25	19.50 22.25	23.85	25.70	27.50	29.3
9	20.35	21.55	23.40	25.00	26.80	28.85	30.90	33.0
10	22.60	23.95	25.95	27.80	29.75	32.05	34.30	36.6
12 14	27.10	28.70	31.10	38.80	35.65	38,45	41.15	51.2
15	33.80	35,80	38.85	41.55	44.55	48.00	51.35	54.9
16	36.05	38.15	41.45	44.35	47.50	51.20	54.80	58.5
18	40.55	42.90	46.60	49.85	53.40	57.55 63.90	61.60	65.8
20	45.00	47.65	51.75	55.35	-	And the Control of th		
24	49.80	52.80	57.40 65.80	70.40	75.45	71.20 81.30	76.30 87.05	81.6
27 28	57.25	60.60	66.90	71.70	77.00	83.00	90.00	95.2
60	00.00		-21001					-

## EMERY CLOTH

IN SHEETS 9x11 in.



24 Sheets in a Quire; 20 Quires in a Ream.

## EMERY CLOTH

IN ROLLS



Per Roll

Extra Coated

Rolls 50 Yards Long

Width	Nos.	No.	No.	No.	No.	No.	No.	No.
Inches	-2/0	0	36	1	1.55	2	21/2	3
3	8 6,90	7.30	7.95	8.45	9.05	9.75	10.45	11.15
3.35	8.05	8,50	9.20	9.85	10.55	11.35	12.15	12.95
4	9.15	9.70	10.50	11.25	12,00	12.95	13.85	14.80
- 5	11.40	12.05	13.10	14.00	15.00	16.15	17.25	18.45
6	13.65	14.45	15.65	16.75	17,95	19,30	20.65	22.05
7	15.90	16.80	18.25	19,50	20,90	22.50	24.10	25.70
8	18.15	19.20	20.80	22.25	23.85	25.70	27.50	29.35
. 9	20.35	21.55	23.40	25.00	26.80	28,85	30.90	33.00
10	22.60	23.951	25.95	27.80	29.75	32.05	34.30	36.63
12	27.10	28,70	31.10	22.30	35.65	38.45	41.15	43.93
14	31.55	33.40	36.30	38.80	41.60	44.80	47.95	51.25
15	33.80	35.80	38.85	41.55	44.55	48.00	51.35	54.90
16	36,05	38.15	41.45	44.35	47.50	51.20	54.80	58.50
18	40.55	42.90	46.60	49.85	53.40	57.55	61.60	65.80
20	45.00	47.65	51.75	55.35	59.20	63.90	68.40	73.10
24	1 49,801	52,80	57.40	61.50	66,00	71.20	76.30	81.60
27	57.25	60.60	65.80	70.40	75.45	81,30	87.05	93.00

## IN "CONVENIENT" ROLLS



Saves slitting and is very convenient for the operator.

Wound on Spools of 50 Yards Each

Width Inches	No.  180-120  2/0-0	No.   90 14	No. 80 1	No. 70 1½	No. 60 2	No. 46 2½	No. 36 3
14-1/2 14	\$1,20 1,55 1,85	1.25 1.60 1.90	1.30 1.65 2.00	1.35 1.75 2.15	1.45 1.85 2.25	1.50 1.95 2.35	1.55 2.05 2.50
1 35 2 2 15	2.50 3.10 3.75	2.60 3.25 3.90	2.75 3.40 4.15	2.90 3.65 4.40	3.05 3.85 4.70	3.25 4.15 5.00	3.45 4.45 5.40

## CARBALOX CLOTH

Wound on Spools of 50 Yards Each

Width Inches	No.     320 to     100	No. 80	No. 60	No. 50	No. 40	No. 36	No. 30
1/4 1	\$1.75 2.35 2.90	1.85 2.45 3.00	1.95 2.60 3.25	2.05 2.70 3.40	2.15 2.85 3.60	2,25 3,05 3,85	2.33 3.26 4.03
11/2	4.05 5.15	4.20 5.40	4.50 5.80	6.15	5.10 6.55	5.45 7.00	5.73

## GARNET PAPER

DISCS AND CIRCLES



Per Hundred

Diam.	Nes.     5/0	No.	No.	No.	No.	No.	No.	No.
Inches	-2/0	0	1,6	1	132	2	2.35	3
1	80.50	,50	.50	.50	.55	. 551	. 55	. 5
2	. 65	.70	.70	.75	.80	85	.90	91
3	.90	.95	1.05	1.15	1.25	1.35	1.40	1.5
315	1.10	1.15	1.25	1.40	1.50	1.65	1.75	1.9
4	1.30	1.40	1.50	1.65	1,85	2.00	2.20	2.3
5	1.80	1.95	2.15	2.40	2.65	2,95	3.20	3.4
6	2.45	2.65	2.95	3.30	3,65	4.05	4.45	4.8
8	4.45	4.80	5.40	6.00	6.65	7.35	8.00	8.7
9	5.80	6.25	7.00	7.75	8.55	9.45	10.30	11.1
10	7.20	7.75	8.65	9,60	10.60]	11.70	12.75	13.8
12	10.60	11.45	12.75	14.10	15.60	17.15	18.65	20.2
14	15.00	16.10	17.90	19.75	21.75	23.85	25.90	28.0
15	17.65	18.90	21.00	23.10	25.40	27.80	30.20	32.6
16	20.40	21.80	24.15	26.60	29.20	31.95	34.60	37.3
18	25.90	27.70	30.70	33.75	37.05	40.50	43.90	47.4
20	31.25	33.50	37.15	40.95	45.05	49.30	53.50	57.8
22	36.80	39.50	43.95	48.55	53.45	58.65	63.70	68.9
23	39.70	42.65	47.50	52.50	57.90	63.60	69.15	74.8
24	42.70	45.95	51.25	56.65	62.55	68.70	74.75	80.9
25	45.80	49.35	55,05	60.95	67.35	74.05	80.60	87.3
26	48.80	52,60	58,80	65.15	72.05	79.30	86.40	93.6
27	51.80	55,90	62.60	69.45	76.90	84.70		100.1
28	55.30	59.70	66.90	74.30	82.25	90.65	98.90	
29	58.50	63.25	70.95	78.90	87.45	96.45		
30	61.90	66.95	75.20	83.70			111.95	
31	65.35	70.75	79.55	88.60			118.80	
32	69.20	75.00	84.35	94.05	104.50		126.20	
3.3	72.85	79.00	89.00	99.25			133.45	
3.4	76.65	83.15	93.75		116.45		141.00	
3.5	80.55	87.40	6.0.1.0.11			135.85		161.8
36	84.55	91.80	103.70	115.95	129.15	148.05	156.65	170.5

Note-We can furnish these discs and circles up to 56 inches in diameter. Prices quoted on request.

## ALOXITE CLOTH



#### SHEETS

#### In Sheets 9x11 Inches

Aloxite, the ideal abrasive, coated on cloth for general shop use. Aloxite is Hard and Extremely Tough, Cuts Fast and shows much longer life than Regular Emery Cloth.

Nos. (and	Grain)	000-180	00 - 150	0-120	$\frac{1}{2} - 90$
Per Ream		\$30.00	30.00	30.00	31.20
Nos. (and	Grain)		1-80	134-70	2-60
Per Ream			\$32.75	34.30	36.50
	480 S	heets in a	Ream.		

## WET OR DRY FINISHING PAPER

#### IN SHEETS

A water-proof Sand Paper, made with a new adhesive, used in water to rub down varnish coats on automobile bodies, etc., just as pumice stone has always been used.



been used.		-		
Nos	1/0	-/	4/0	6/0
Per Ream	\$25.50	23.00	19.00	15.50
One-half Re	am in a	Package.		

## STEEL WOOL STANDARD PACKAGE



#### HOUSEHOLD PACKAGE



 Nos.
 00
 0
 1

 Equal to Sand Paper.
 000
 00
 0

 Per Dozen Packages.
 \$1.20
 1.20
 1.20

One-half Gross in a Case; One Dozen Packages in a Carton.

Steel Wool does not scratch, clog or gum up, adapts itself to all shapes and reaches every spot and crevice. It does the work in onethird the time.

## LEAD WOOL

In Rope Form

The best possible calking material for cast iron pipe. Where cement and cast lead joints fail, Lead Wool will reduce the chance of leaky joints to a minimum.

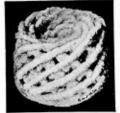
Lead Wool is inserted rope by rope and each blow on the wool expands it into the pipe and drives back the jute.

Per Pound . . . . . 80 . 30

## ASBESTOS PAPER



Made from pure asbestos fibre; fire proof, flexible, proof against decay; non-heat conductor, deadening felt and building paper. For covering heaters and heater pipes, steam and hot water pipes, etc.



## ASBESTOS WICK PACKING

A pure, long-fibred, hard twisted asbestos wick. Can be separated and packed in any desired shape, around small steam and other valve stems.

## FLAKE GRAPHITE DIXON'S TICONDEROGA



Has many valuable applications as a lubricant for cylinders, valves and bearings, either alone or mixed with oils and greases.

Also indispensable to engineers and mechanics for coating gaskets and packing for pipe fittings and the like.

Prepared in the coarser (or No. 1) flake, and the finer (or No. 2) size. Each

## CARPENTERS CHALK



For making Chalk Lines, Patterns, etc.

	TO DO THE SAME OF		H:	Ш		R	οų	m	d	C,	(4)	k								F	° e	r	G	ros	38
No.	130—White	25.5				-	20		,					1	1	Ŧ.		60					82	. 3	0
No.	131—Red	100		6							·												2	N	0
No.	132—Blue .									+						è	٠.		,		ļ.		2	.8	0
	7	Wei	ght	1	P,	21	- 1	Re	13	5		P	or		d	0									

One-half Gross in a Box.

## SCHOOL CRAYONS

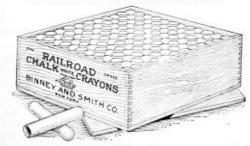


Free from Grit - Soft Points-will not scratch the boards.

These are the finest chalks on the market.

Per Gross No. 307-Atlantic, Weight Per Gross 2 1/8 Lbs..... \$0.50 One Gross in a Box.

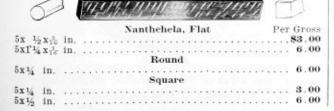
## RAILROAD CRAYONS



More conveniently handled and more economical than Lumn Chalk

	82 - 60
	3.00
	3.00
ox 11 Pounds.	
	s in a Box.

## METAL WORKERS CRAYON



## LUMBER CRAYONS

For marking steel and iron, concrete and stone and lumber in all stages of preparation.

## Nº 361 JAPANNED HEXAGON LUMBER PENCIL JOS. DIXON CRUCIBLE CO. JERSEY CITY, N.J.

Hexagon Shape, 4 1/2 in. Long, 1/2 in. Diameter Per Dozen No. 361-Black, Medium Soft, Japanned Finish . . . . 80.70



Hexagon Shape, 4 12 in. Long, 12 in. Diameter Per Dozen 

Hexagon Shape, 41/2 in, Long, 1/2 in, Diameter Per Dozen
No. 496—Yellow Color, Paper Covered
No. 520—Red Color, Paper Covered
No. 521—Blue Color, Paper Covered
No. 522—Green Color, Paper Covered 1.25
No. 523-White Color, Paper Covered
One Dozen in a Box

## CARPENTERS PENCILS



Gross

Per

Per

No. 410-Dixon's, 7 in. Oval, Polished Cedar Finish. Blind Stamped ... .86.30 One Dozen in a Package, One-half Gross in a Box.



No. 538H-Framers' 7 in., Beveled, Hard Lead Maroon Finish, Gold Stamped .. 8.90 No. 539H-Framers', 9 in., Beveled, Hard Lead,

Maroon Finish, Gold Stamped . . 10.50 One Dozen in a Package, One-half Gross in a Box.



Per Gross

No. 997H-Red and Black, 7 in., Hard Lead, Black Bevel, Bright Red Finish, Silver Stamped. No. 998H—Red and Black, 9 in., Hard Lead, Black Bevel, Bright Red Finish, Silver Stamped..... 10.50 One Dozen in a Package, One-half Gross in a Box.

### LEAD PENCILS



Yellow Finish No. 1386-Ticonderoga, Nos. 1, 2 or 2 1/2 Lead, Hexagon Cornerless, Red Rubber Tip, Gilt Ferrule. a Standard Office Pencil of Superior Merit and Pleasing to the Fingers. . ...88.20 One Dozen in a Box, One-half Gross in a Carton.

#### DRAWING PENCILS



	Yellow Finish Per Dozen
No.	170HB-Eldorado, Hexagon, Cornerless, Stamped
	with Gold, for Draftsmen, Artists, Engineers,
	etc., Red Rubber Tipped
	One Dozen in a Roy

## CHALK LINES



White Cotton

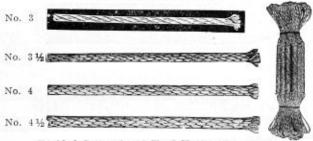
		13	g in. Thick.	
Nos	100 600			55 55
Balls, Feet				50 100
Per Dozen				1.00 2.00
				Per Pound
No. 66-1	Lb.	Hanks		
				Particular and the second of t

## MASON LINES

White Cotton 3 in. Thick.

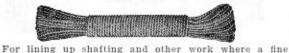
Balls, Yards	35	70	100
	85.00	7.50	10.00
Y	ellow		
	. Thick.		
Balls, Yards	35	70	100
Per Dozen	85.00	7.50	10.00

## BRAIDED LINE



Braided Cotton in 16 Yard Hanks, Connected Size ...... 3 3½ 4 ..... \$6.30 6.30 6.80 Per Dozen Hanks. Twelve Hanks, Connected, in a Box.

### SHAFTING LINES SEAGRASS



strong line is required. 25 Foot Hanks, Connected Per Dozen No. 2-One Dozen Hanks in a Box . . . . . . ....84.80

## AWNING CORD



White Cotton, Twisted Per Pound ....80.75 3/16 in. Diameter. 500 Feet on a Reel.

## SASH CORD

Note-For Sash Cord Refer to Builders' Hardware Section of This Catalog.

## CHALK LINE REELS



Hardwood, Polished Per Dozen No. 12—Length 2 % in., Diameter 2 in.... Three Dozen in a Box. .....\$1.20

## TWINES





1/2 Lb. Ball.

½ Lb. in Carton.

### "TRYSUM" COTTON

		W	m	e GB	rze.	u.	
1/2	Lb.	Balls.	3	Lbs.	in	a	Package.

72 Do. Dalle, o Dob. In a Lackage.	
Nos	24
Per Pound	. 80
No	18
Per Pound	\$0.80
REGULAR COTTON	
White, in 1/6 Lb. Balls, 5 Lbs. in a B	ag
Per Pound	
HEMP TWINE	
½ Lb. Balls, 3 Lbs. in a Package.	Por Pound
No. 18	
SPRING TWINE Hemp	
In Balls Weighing About 1 Lb.	Per Pound
No. 6	
In ½ Lb. Balls,	Per Pound
No. 4½	
In Balls Weighing About 1 Lb.	Per Pound
No. 000 JUTE TWINE	\$0.32
In 1 Lb. Balls,	
4 Ply	

## TWINE HOLDERS

#### HANGING TYPE

No.



Medium Per Dozen 13-Cast Iron, Copper

Large

Per Dozen 113-Cast Iron, Copper 

#### BEE HIVE PATTERN



Japanned.

No.	31—Size	Size	ze 4½x4 in	in.	Twine	Chamber,	Weight	Per Dozen Each
	2 %	Lbs.			me in	n Pov		\$9.00

## HAY FORKS

THREE TINE

Solid Steel Shanks, Oval Polished Steel Tines, Gold Bronze Head, Ferrule and Cap



First Quality

Strap Ferrule, Polished and Waxed Bent Handles, 12 in. Tines. ..... SB34 1/2 Nos. SB35 Length Handle, Feet ..... 5 Weight Per Dozen, Lbs..... 35 32 \$19.00 Per Dozen ..... 20.00 One Dozen in a Bundle, Tines Covered.

Second Quality

Strap Ferrule, Bent Handle, 11% in. Tines. Nos. YSB34 1/2 VSR35 Length Handle, Feet...... 4 1/2 Weight Per Dozen, Lbs..... 30 32 Per Dozen ..... \$17.25 18.00 One Dozen in a Bundle.

MANURE FORKS

Solid Steel Shanks, Oval Polished Steel Tines, Gold Bronze Head, Ferrule and Cap, Polished and Waxed Handles

> LONG HANDLE, FIRST QUALITY FOUR TINE



Strap Ferrule, Bent Handles, 13 in. Tines Per Dozen No. S441/2-Length of Handle 41/2 ft., Weight Per Dozen 41 Lbs......\$23.25



Strap Ferrule, Bent Handle, 13 in, Tines

Per Dozen No. S541/2-Length of Handle 41/2 ft., Weight Per Dozen 45 Lbs.....\$26.50



Strap Ferrule, Bent Handle, 13 in. Tines Per Dozen No. S64 1/2 - Length of Handle 4 1/2 ft., Weight Per ....\$29.25

Dozen 48 Lbs... D HANDLE, FIRST QUALITY



Strap Ferrule, Steel D Handle, 13 in. Tines Per Dozen No. S4D-30 in. Bent Handle, Weight Per Dozen

38 Lbs. .....\$23.00

### FIVE TINE

Strap Ferrules, Steel D Handle, 13 in. Tines No. S5D-30 in. Bent Handle, Weight Per Dozen 

#### SIX TINES

Strap Ferrule, Steel D Handle, 13 in. Tines No. S6D-30 in. Bent Handle, Weight Per Dozen 

## SPADING FORKS

FOUR TINES, STEEL D HANDLE



Light Pattern, 11 in, Angular (Diamond Back) Tines First Quality

No. SALD-Strap Ferrule, Gold Bronze Head, Fer-Second Quality

No. YSALD-Strap Ferrule, Black and Bronze Finish, Tumbled Tines, Bent Steel D Handle, Third Quality

No. ZSALD-Strap Ferrule, Black Finish, Tumbled Tines, Bent Steel D Handle, Weight Per Dozen About 46 Lbs..... . . . . . . . 16.10 All Above, One-half Dozen in a Bundle,

## STONE OR BALLAST FORKS



Strap Ferrule

Solid Steel Shank, Black Finish, Polished and Waxed Nos. ..... 10 13 1 1/8 84 46.10 One-half Dozen in a Bundle.

> COAL FORKS UNION



Strap Ferrule Regular Pattern, Solid Steel Shank, Black Finish, 16

in Diamond Tines, Polished and Waxed Steel D Handle. Nos. ...... C110 C112 No. of Tines.... 10 12 Width, Inches ..... 11 1/2 13 Space Between Tines, Inches.... 76 7/8 Space Between Thick. 84
Weight Per Dozen, Lbs. 846.10 95 52.50 Per Dozen ...... One-half Dozen in a Bundle.

## COKE FORKS UNION



Strap Ferrule Solid Steel Shank, Black Finish, 17 in. Diamond Tines, Polished and Waxed Steel D Handle.

K12 K116 K10 Nos. . No. of Tines...... Width, Inches 10 12 14 16 20 1/2 19 1/2 14 18 Space Bet. Tines, Inches. 114 1.34 114 Space Bet. 11hes., 88 100 Weight Per Dozen, Lbs., 88 100 58.80 120 70.00 One-half Dozen in a Bundle.

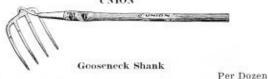
## ENSILAGE FORKS



Strap Ferrule
Solid Steel Shank, Black Finish, Half Polished, 16 in.
Oval Tines.
No. E8—Eight Tines, Raised Shoulders, Polished
and Waxed Steel D Handle, Weight Per Dozen

# One-half Dozen in a Bundle. POTATO HOOKS

UNION



No. 4DGN—Four Tine, Diamond Back, Solid Steel Shank, Bronze Finish, 4½ ft. Straight Handle, Weight Per Dozen 28 Lbs......\$15.00 One Dozen in a Bundle.

## CULTIVATORS

SPEEDY



No. 48C—Four Tine, Width Across Tines 5 in., Digs 5 in. Deep, Weight Per Dozen 22 Lbs.......\$12.00 One Dozen in a Bundle.

## LADIES HOES

UNION



Solid Shank, Full Polished Steel Blade Per Dozen No. L5—5 in. Blade, Bronze Finish, 4 ft. Selected Handle, Weight Per Dozen 18 Lbs.............\$10.60 One Dozen in a Bundle, Blades Covered.

## FIELD AND GARDEN HOES

EUNION S

One Dozen in a Bundle, Covered.

## RIVETED HOES

UNION



## MORTAR HOES

UNION



Bronze Finish, Full Polished Steel Blades

Blades 10 in, Wide x 6 in, Deep, 5 ½ ft. Polished and
Waxed Handles. Per Dozen
No. MR10—Solid Shank \$18.50
No. 5MR10—Solid Socket 20.00

Weight Per Dozen 52 Pounds.
One Dozen in a Bundle, Blades Covered.

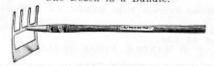
# MORTAR-MIXER HOES



## WEEDING HOES







## SCUFFLE HOES



Braced Malleable Iron Shank, Black Finish, Bright Steel
Blade Per Dozen

## GRAPE HOES



Although primarily intended for use in vineyards, these Hoes are extensively used for cultivating gardens and many other uses.

Black Finish, Square Eye, Handled

Per Dozen No. SGH-Solid Crucible Cast Steel Head, 48 in. Selected Handle, Weight Per Dozen 35 Lbs.... \$30.00 One Dozen in a Crate.

## TURF EDGERS



Solid Socket, Polished Steel Blade, Gold Bronzed Per Dozen No. STE-4 ft. Selected Handle, Weight Per Dozen One Dozen in a Bundle, Blades Covered.

## GARDEN TROWELS



#### One Piece Solid Stamped Steel

Per Dozen No. 01—5 in. Blade, 20 Gauge Plain Steel, Nicely Finished Natural Wood Handle, Weight Per One Dozen in a Box.



#### Extra Heavy Riveted Shank

Per Dozen

No. 12-6 in. Blade, Heavy Malleable Shank, Steel Blade Half Polished and Finished in Blue One Dozen in a Box.



#### Heavy Transplanting

Per Dozen

No. 020-5 in. Blade, Extra Heavy Steel Finished in Red Enamel, Fine Polished Natural Wood Handle, Weight Per Dozen 3 1/2 Lbs.......\$2.40 One Dozen in a Box.



All Steel

No. 103-11 1/2 in. Long Over All, One Piece 19 Gauge Steel, Cannot Bend, Attractively Finished in Green Enamel with Polished Tip, Weight Per Dozen 4 1/2 Lbs... One Dozen in a Box.

## GARDEN TROWELS



American Beauty

Handles are extra long, hand turned and finely finished. Extra Heavy Steel.

Per Dozen No. 100-14 1/2 in. Long Over All, Half of Blade Polished, Rest Finished in Bright Red Enamel, Weight Per Dozen 7 Lbs.... One Dozen in a Box.

## GARDEN FORKS



No. 1-Medium Weight, Malleable Iron, Finished in Red Enamel with Polished Natural Wood Handle, Weight Per Dozen 3 ½ Lbs......\$2.50 One Dozen in a Box.

## WEEDING HOOKS

EXCELSIOR



No. WH-Five Prong, Malleable Iron Tinned, Black Enameled Handle, Weight Per Dozen 3 Lbs......\$2.00 One Dozen in a Box.

## GARDEN RAKES

MALLEABLE

Braced Shank, Straight Teeth Bronze Finish

5 1/2 Foot Handle.

Nos	MB10	MB12	MB14	<b>MB16</b>
No. of Teeth	10	12	14	16
Weight Dozen, Lbs	26	28	31	35
Per Dozen	\$8.25	8.50	9.00	9.60

STEEL

One-Piece Solid Steel Forged Head, Hammer Drawn Straight Teeth, Bronze Finish, 5 1/2 ft. Polished Handle.

#### Single Shank

Nos	S14	S16
No. of Teeth	14	16
Weight Per Dozen, Lbs	35	39
Per Dozen	\$15.00	15.85

Forged from One-Piece of Bar Steel, Teeth Hammer Drawn. Bronze Finish. 5 1/2 ft. Handle.

Single Shan	k, Curved Tee	
Nos	SC1	2 SC14
No. of Teeth		14
Weight Per Dozen, Lbs		34
Per Dozen		0 15.00

All Above, One Dozen in a Bundle.

## ROAD RAKES

UNION STEEL

Extra Heavy

Forged Steel, Single Shank, Straight Teeth, Black Finish.

Per Dozen
No. R16—16 Teeth, Length of Handle 6 ft., Weight

# ASPHALT OR TAR RAKES



ish, Strap Ferrule. Per Dozen

No. A14—14 Teeth, 18 in. Shank, Length of Handle

5 ft., Weight Per Dozen 66 Lbs......\$30.00

One-half Dozen in a Bundle, Heads Not Covered.

# LAWN RAKES



The teeth are set by a patented process which absolutely prevents them from dropping out.

Well Seasoned Hardwood Head and Teeth, Oil Finished Per Dozen

No. 212—26 Teeth, 23 in. Curved Head, Malleable Iron Brace, 5½ ft. Selected Handle, Neat, Strong and Durable, Weight Per Dozen 34 Lbs......\$10.50 One Dozen in a Crate.

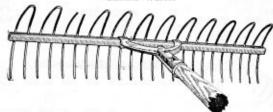
#### AUTO CLEANER



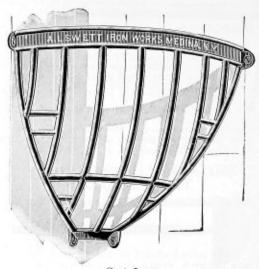
Selected Hickory, Mallcable Iron Socket, Self-Cleaning, Oil Finish and Varnished, Japanned Socket

Nos	205 - 26
Number of Teeth	26
Weight Per Dozen, Lbs 67	72
Per Dozen	24.00
One-half Dozen in a Crate	

#### GIBBS WIRE



## CORNER HAY RACKS



Cast Iron

## CORNER MANGERS OR FEED BOXES



Cast Iron, Japanned, with Flat Food Guard

No. 1-13x13x8 in., Average Weight Each 17 Lbs..\$3.75

## BULL RINGS



Extra Heavy, Polished Copper with Screwdriver

## CATTLE LEADERS



Bright, Malleable Iron, Brass Wire Spring

Nos 51
Width Over Jaws, In 24
Length, Inches 5
Weight Box, Lbs 21/2
Each
Ten in a Box.

## HARNESS SNAPS

BULL DOG CHAIN



XC Plate Per Dozen No. 583B-51/4 in. Long, Weight Per Dozen 41/2 Lbs. \$2.92 One Dozen in a Box.

#### "NEVERBREAK" BOLT



Open Eye, XC Plate Per Gross One-quarter Gross in a Box.

#### SAMSON OPEN EYE BOLT

Guaranteed to Close without Breaking.

XC Plate Per Dozen No. 450B-% in. Eye, Length Over All 51/2 in .... \$6.24 Two Dozen in a Box.

#### SWIVEL BOLT



XC Plate, Round Swivel Eye 423 C Eye, Inches ..... 18.00 \$15.80 Per Gross ..... One-half Gross in a Box.

#### ROUND EYE BOLT



XC Plate, Round Eye 436B 436AA 436 A Nos. 9.60 10.00 Per Gross .... One-half Gross in a Box.

#### OLD TIME



Bronzed

Heavy Pat	tern, Al	uminum	Steel S	pring	21071027
Nos	428E 1 12 ½ \$4.80	428G 1 ¼ 17 ½ 8.40	1 1/2 27 1/4 11.00	134 32 14 14.00	428N 2 43 14 16.00
	CLEV	ELANI			

XC Plate, Round Eye Flat Steel Spring. Per Gross No. 422A-1/2 in. Eye,..... One-half Gross in a Box.

## SNAPS



Bronzed, Oval Loop Per Gross No. 427A—Size 1/2 in.. One Gross in a Box.



Cleveland Bag

Round Eye, Aluminum Steel Spring.

Per Gross No. 277—XC Plate, % in . . . . . . . . . . . . . . . \$4 . 80 One Gross in a Box.



Round Eye

	Flat Steel Spring.	Per Gross
No.	431AA-XC Plate, % in. Eye	83.60
No.	431AA—Bronzed, % in. Eye	4.80
	One Gross in a Box.	

## BUCKLES

SHOE

XC Plate, Imitation Roller Per Gross One Gross in a Box.

SKATE XC Plate, with Roller Per Gross

No. 420C—¾ in. . . . . . . . . . . . . . . . 4 . 20 No. 420E—% in. ..... 6.00

One Gross in a Box.

## HARNESS

Black Japanned, Malleable Iron, with Roller Per Gross

No. 50C— ¾ in., 1 Gross in Box. \$3.30 No. 50E—1 in., ½ Gross in Box. 4.60 No. 50G—1¼ in., ½ Gross in Box. 6.40

#### FERRULES SEAMLESS BRASS



Nos	$\begin{array}{c} 00 \\ 1 \\ \$1.56 \end{array}$	0  å 1.30	1 % 1.10	2 18 .88	3 % .75	4 11 .70
Nos	5 % \$0.65 )ne Gros	6 .55	7 ½ . 45	8 16 .41	9 38 .37	10 ਜੰਗ .33

#### MALLEABLE IRON



Diameter, Inches ... 12 % 74 ... 20 

# IMPLEMENT HANDLES STRAIGHT HAY FORK

X Quality, Plain, Chucked and Bored,	Waxed	and Polished
Length, Feet	5	6
Weight Per Dozen, Lbs	20	24
Per Dozen	\$4.20	6.70

#### BENT HAY FORK

X Quality, Plain, Chucked and Bored, Waxed and Polished
Per Dozen
Length 5 Feet—Weight Per Dozen 20 Lbs.......\$5.00

#### BENT MANURE FORK

X Quality, Plain, Chucked and Bored, Waxed and Polished Per Dozen Length 4½ Feet—Weight Per Dozen 18 Lbs......\$5.00

#### HOE AND RAKE

#### PLANTER EYE HOE

X Quality, Waxed and Polished, 2 in. Diameter at Butt

Per Dozen

Length 4 Feet—Weight Per Dozen 20 Lbs......\$4.90

#### LONG BENT SHOVEL

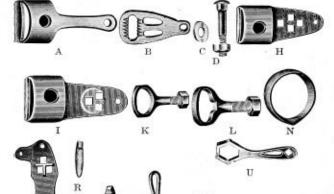


Ames Bend
X Quality, Waxed and Polished Per Dozen
Length 4½ Feet—Weight Per Dozen 22 Lbs.......\$5.70

#### WOOD D SHOVEL



Ames Bend
X Quality, Waxed and Polished Per Dozen
Length 30 in.—Riveted D, Weight Per Dozen 20 Lbs. \$7.40
All Above, One Dozen in a Bundle.



X

0

## IMPLEMENT HANDLES

WOOD D SCOOP



X Quality, Regular Bend, Waxed and Polished.

Per Dozen

Length 30 in.—Riveted D, Weight Per Dozen 21 Lbs. \$7.40

#### WOOD D SPADING FORK



X Quality, Bent and Riveted, Chucked and Bored Per Dozen Length 30 in.—Riveted D, Weight Per Dozen 21 Lbs. \$6.90

#### WOOD D SPADE



X Quality, Regular Bend, Waxed and Polished
Per Dozen
Length 30 in.—Riveted D, Weight Per Dozen 21 Lbs. \$7.10

#### IRON D COKE FORK



No. 1 Quality, Strapped and Capped

Per Dozen

Length 30 in.—Weight Per Dozen 25 Lbs......\$10.60

All Above, One Dozen in a Bundle.

## MALLEABLE D TOPS



No. 3—Malleable Iron Head, Plain, with Hardwood Handle, Weight Per Dozen 7½ Lbs......\$2.70 Open Stock.

#### SNATH PARTS

SNAIH PARIS	
Nos. Per I	lozen
A-End Web, Fenn's Patent Swing Socket Snaths	
B-Swing Socket Plate for Color Color	1.70
B-Swing Socket Plate, for Swing Socket Snath.	1.35
C-Lock Plate, for Swing Socket Snath	. 55
D-Lock Bolt, for Swing Socket Snath	1.35
<ul> <li>H—End Web, for No. 55 Solid Plate Snath</li> <li>I—End Web, for No. 105 Patent Loop Bush</li> </ul>	
Snaths	2.00
L-Loop Bolt and Nut, for All Grass Snaths	2.00
Bush Snath *N—Heel Drive Ring, for Grass and Bush	
Snaths	2.00
O-Solid Plate Socket, for All Ring Snaths	1.25
N-Small Heel Wedge, for Grass Snath	. 80
5 Large Heel Wedge, for No. 100 Buch Spoth	. 80
1—Grass Wrench	1.00
U—Bush Wrench	1.00
	4.00
*When Ordering Give Size Nos. as Follows:	
Nos 5 6 7 7½ 8	9

Diameter, Inches. . 1 12

## SCYTHE SNATHS



Made from the highest grade Northern Second Growth Ash. Each stick is split with the grain of the wood.

#### REGULAR BEND



Each No. 50-Swing Socket Loop Heel Grass Snath, One-half Dozen in a Bundle.



Each

No. 100-Two Ring, Solid Plate Bush Snath, Weight . \$2.00 Per Dozen 58 Lbs..... One-half Dozen in a Bundle.

## SCYTHES

BLOOD'S

GRASS



No. 119—Regular Heel or Clipper Cutting Edge Polished, Balance of Scythe Black Enam-

eled Finish. 32 34 24.00 24.00 Average Weight Per Dozen 25 Pounds.



No. 219-Wide Heel or Western Dutchman

Cutting Edge Polished, Balance of Scythe Black Enameled Finish. 34 Length, Inches ...... 30 . \$24.00 24.00 24.00 Per Dozen ..... Average Weight Per Dozen 26 Pounds.

### WEED



Cutting Edge Polished, Balance of Scythe Black Enameled Finish.

Per Dozen

BUSH



Cutting Edge Polished, Balance of Scythe Painted Red. Per Dozen

No. 150-Sizes 16 to 24 in. Assorted, Average All Above, One-half Dozen in a Carton.

## SCYTHES

ENGLISH GRASS



Solid Cast Steel Blade. Riveted Back

Per Dozen English-Assorted Lengths, 32 and 34 in., Average 

One-half Dozen in a Bundle,

## BUSH HOOKS



Hand Forged Tool Steel Blade, Tempered and Sharpened

No. 2-Heavy, 34 in. Axe Handle, with Strap and Bolt, Cutting Edge Polished, Balance Bronzed, One Dozen in a Case.

## GRASS HOOKS

ENGLISH



#### Riveted Back, Through Tang

Require no grinding when dull and are easily sharpened with a scythe stone.

Per Dozen No. 2G-Forged from Crucible Cast Steel, 11 in. Blade, Weight Per Dozen 11 Lbs...... \$ 9.50

No. 3G-Forged from Crucible Cast Steel, 12 in. Blade, Weight Per Dozen 12 Lbs...... 10.50 One Dozen in a Carton.

#### GERMAN



Per Dozen

No. 1G-16 in., Hammered Blued Steel Blade, Turned Back, Plain Wood Handle, Weight Per Dozen 6 Lbs. .....\$6.00

One-half Dozen in a Bundle.

## GRASS HOOKS

VILLAGE BLACKSMITH



#### BLUE RIBBON



No. 400-12—Tempered Steel Blade, Highly Polished, Blue Enameled Shank, Beaded Black Enameled

## GRASS SHEARS



Per Dozen



Per Dozen

## SHEEP SHEARS



Per Dozen

### HORSE AND MULE SHEARS



Per Dozen

## HEDGE SHEARS DISSTON LADIES PATTERN

A light graceful tool especially designed for ladies' use and light work. Blades are hollow ground causing them to close on the cutting edge.

Disston Steel Blades, Full Polished Per Pair No. 1LP—6½ in. Blade, Black Enameled Hardwood Handle, Steel Ferrules, Weight Per Pair 1½ Lbs. \$1.75 One Pair in a Package.

#### DISSTON REGULAR

No spring tension—a bolt that fits into a threaded hole in the blade is tightened until proper tension is received, then locked in place by a locknut.



Weight Per Pair, Lbs... 2 % 3 ½
Per Pair ...... \$2.85 3.00
One Pair in a Package.

# PRUNING SHEARS

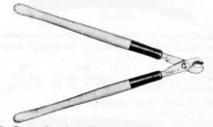
COLUMN TO



3.25

Heavy Disston Steel Blades, Polished Hardwood Handles,
Heavy Ferrules

No. 1—Length Over All 2716 in 20 in Handles



Both Jaws Cutting Jaws and Both Jaws Curved

CLYDE



Solid Steel Blade and Hook, 20 in, Natural Finished Ash Handles, Black Japanned Malleable Ferrules.

## TREE PRUNERS



Hook and Blade of Solid Steel of special tensile strength so as to hold a keen cutting edge. Blade 2 % in. long. convex shaped with deep bevel, attached to hook with a % in. bolt. Hook and blade accurately ground, 7 in. arm extends from cutting edge (all one piece) and is connected with lever by a  $\frac{1}{16}$  in, wire, 12 in, steel lever with wood handle,  $\frac{5}{8}$  in, coil spring 6 in, long returns lever to position.

Light Weight, Tough, Strong Wood Pole, 1/4 in. Square, Rounded Edges, Varnished

Length, Feet	6	12
Weight Per Dozen, Lbs	38	60
Per Dozen		30.00
One-half Dozen in	a Bundle	

### PRUNING SHEARS PEXTO



Per Dozen No. 50-California Pattern, 9 in. Long, Polished Tempered Tool Steel Blade Riveted to Malleable Iron Head and Handles, Dead Black Finish, Volute Spring and End Fastening Clip, Weight Per Dozen 10 ½ Lbs......\$15.00 One Pair in a Box. One-half Dozen Pairs in a Carton,



Per Dozen

No. R85-Swiss Pattern, 8 1/2 in. Long, Full Polished. Tool Steel Blade Riveted on and Ground Convex, Double Flat Brass Springs, Regulating Ratchet Nut, Removable End Clip, Weight Per Dozen 12 % Lbs......\$36.00 One Pair in a Box, One-half Dozen Pairs in a Carton,

## PRUNING SHEARS

PEXTO Blades fastened to head with screws. Equipped with brass plated coil spring and fastening clips.

Connecticut Pattern

Per Dozen

No. 0-9 in, Long, Polished Steel Blade, Black Japanned Iron Handles, Weight Per Dozen 9 %



No. 109—Length 9 in., Best Cutlery Steel Blade, Forged Entirely of Steel, All Parts Milled and Interchangeable, with Castellated Nut and Catch to Retain Close Adjustment, Weight Per Dozen 

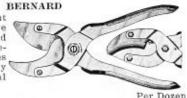
#### DISSTON

With Patent Lock Nut Tension

Forged from Disston-Made Steel with Hardened and Tempered Sharp Cutting Edges, Full Hollow Handles with Spring Hook Catch at End. Per Dozen

No. 150-Length Over All 81/2 in., Length of Blade 2 1/2 in., Volute Spring, Weight Per Dozen 8 1/4 

Auxiliary equipment consists of a positive spring action controlled by a simple locking device. Cutting blades open up sufficiently wide for all practical purposes.



No. 8-"Trimmer", Length 8 in., Wt. Dozen 8 Lbs. \$12.00 All Above, One-half Dozen Pairs in a Box.

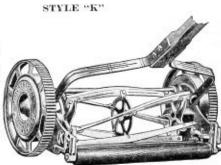
## LAWN MOWERS PHILADELPHIA

STYLE "A"

Have set screw adjustment. Set screws are case hardened.

The adjustable caps are split and not solid, so as to take up the wear in the journal bearings.

Vanadium crucible steel stationary knives attached to cast back with screws. Vanadium steel cylinder blades are attached to cylinder ends with rivets.



Style "K", Plain Bearings

10 in. Drive Wheels, 61/2 in. Cylinder, 5 Revolving Blades, Single Pinion, Geared Both Sides, Painted Green with Red Cylinder.

Width of Cut, Inches.... Weight Each, Lbs.... 40 \$24.00 26.00 28.00 30.00 Each .....

Bearings are 1% to 2% in. long and 👬 in. diameter, bored for extreme accuracy. A good general purpose mower for hard knocks. Single pinion gears on each side.

Style "A", Plain Bearings

10 in. Drive Wheels, 6% in. Cylinder, 4 Revolving Blades, Train of Three Gears on One Side, Double Ratchet, Finished in Silver and Gold. Neatly Striped. Width of Cut, Inches... 15 Weight Each, Lbs..... 39 17 

All steel construction and a front axle and train of gears on one side only, but driving from both wheels by means of a double ratchet. Bearings bored for extreme accuracy, 11/2 in. diameter and 1 1/4 and 2 in. long. Has self-oiling cups and Vanadium crucible steel blades. One in a Box.

## LAWN MOWERS

COLDWELL



Ball Bearing

Finest drop forged steel balls, case hardened. made from steel shafting, turned and ground for true finish. Gears are pinion and flat sliding pawl type. Direct drive from both sides. Gears enclosed and protected. Open type frame is light but very strong. Shouldered

tie rod with nut holds frame rigid. Open style wheels with solid center, six spokes.

Specially designed lipped steel, finest quality bottom knife. Hardwood varnished handle with adjustable braces, Finished in Regal Green and Gold.

Height of cut 1/2 to 11/2 in.

## 10 in. Drive Wheels, Five Crucible Steel Blades

Width of Cut, Inches	14	16	18
Shipping Weight Each, Lbs	50	54	56
Each	\$16.50	17.75	18.75
One in	a Box		



Ball Bearing

Same high grade material and careful workmanship as used in the higher priced machines. Ball bearings and cones of the same grade and finish. Pinion and sliding flat pawl drive. Solid wheels.

Flat crucible steel self-sharpening bottom knife. Hardwood varnished handle. Finished in aluminum with red and gold trim,

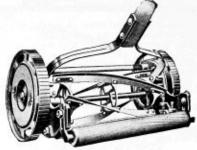
Height of Cut 1/2 to 11/2 in.

#### 8 in. Drive Wheels, Four Crucible Steel Blades

Width of Cut, Inches	12	14	16	18
Ship'g Weight Each, Lbs.	31	3.8	40	42
Each	\$12.00	12.25	12.75	14.00
One	in a Bo	X.		







LAKEWOOD

Ball Bearing

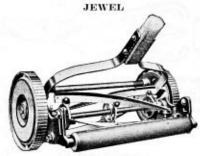
Finest case hardened drop forged steel balls. Cones are made from steel shafting, turned and ground for true finish. Gears are internal enclosed flat pinion and sliding pawl. Direct drive from both sides.

Flat crucible steel self-sharpening bottom knife. Hardwood varnished handle with adjustable braces. Solid style wheels with eight spokes. Aluminum finish with red and gold trim

Height of Cut 1/2 to 11/2 in.

#### 9 in. Drive Wheels, Four Crucible Steel Blades

Width of Cut, Inches	14	16	18
Shipping Weight Each, Lbs.	44	47	49
Each	\$14.00	14.75	15.25
One in a	Box.		



Bronze Bearing

Material and workmanship are of the same high quality as used in the higher priced machines. Adjustable split bronze bushings. Pinion and sliding flat pawl drive. Solid wheels.

Flat crucible steel self-sharpening bottom knife. wood varnished handle. Finished in aluminum with red and gold trim.

Height of Cut % to 11/4 in.

### 8 in. Drive Wheels, Four Crucible Steel Blades

Width of Cut, Inches	12	14	16
Shipping Weight Each, Lbs	36	38	40
Each 8	89.00	9.50	10.00
One in a Bo	X.		

### LAWN TRIMMERS COLDWELL, BALL BEARING

For finishing along walks, walls and flower beds, where the regular lawn mower cannot be used. Does away with the job of trimming with shears,

Case hardened drop forged steel balls. Cones made from steel shafting. Fine cut gears, pinion and pawl drive. Solid wheel on right, small caster wheel on left side. Parts are malleable and cast and of first quality.

Finest tool steel, self-sharpening bottom knife, heavily ribbed bottom knife bar. Finished in gold bronze with maroon striping.

Each Trimmer-8 in. Cut, Four Crucible Steel Blades, 8 in. Wheels, Shipping Weight Each 31 Lbs..... One in a Box.

# POWER LAWN MOWERS COLDWELL MODEL "L," WITH ROLLER



#### Simple, Economical, Dependable

Designed to fill the need for a practical motor driven, hand controlled lawn mower with plenty of reserve power.

Cuts close up to and around trees, shrubbery, walks and driveways, is efficient on small areas and cuts large areas at a great saving of time.

The cutter knives and full width traction roller are each independently driven direct from the motor and each has its separate clutch and control lever. The full floating cutter front conforms readily to the uneven surface of the ground.

Motor and all working parts are protected from flying grass and dirt. Gears are enclosed and run in oil. Finest roller chain with provision to take up wear.

Motor is a Fuller & Johnson, 3 ½ H. P., 4 Cycle, Water Cooled Motor with Radiator and Fan. Control Levers are conveniently located. Carries a days gas supply. Schebler Carburetor with Choke. Splitdorf Magneto.

Finished in Tartter Green and Gold

ELECTRIC LAWN MOWERS



Mows the lawn quickly and without labor.

Each

Equally suitable for city or suburban lawns and is simple, efficient, inexpensive and dependable which eliminates entirely the drudge of mowing the lawn by hand.

The Mower Unit

Cut Steel Gears are enclosed in dust-proof housing and run in ol I im ken Tapered Roller Bearings carry the revolving Cutter.

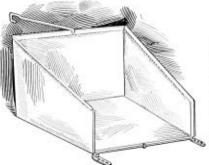
the Drive Wheels and the Main Drive Shaft. Triple Pawl Type of Ratchets are used in the drive wheels. Large three section guard roller permits easy turning and prevents marring the turf. Polished hard maple grips on tubular steel handle. The Power Unit

A ½ H. P. General Electric Motor designed to operate in connection with the ordinary house lighting circuit and the specially designed Universal features permit its use on Alternating Current circuit on all frequencies from 60 Cycles to 25 Cycles inclusive and also on Direct Current circuits.

Operating lawn mower under normal conditions, the motor consumes about the same amount of current as an electric iron.

For Use on 110 Volt, House Lighting Circuit A. C. or D. C. Electric Lawn Mower—Width of Cut 21 in., 5 Tem-

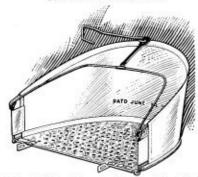
# GRASS CATCHERS PERFECTION



Made of fine quality White Canvas, Heavily Galvanized Wire
Frame, Adjustable
Steel Hooks, will
fit any mower
made and is always in position to
receive catcher.

9 in. Deep Per Dozen

13 in, Deep



Extra Fine White Canvas, Heavy Galvanized Non-Skid Iron Bottom, Heavy Galvanized Wire Frame, Adjustable Steel Hooks, will fit any make of mower and always in position to receive Catcher. Perfection Handle.

13 in, Deep Per Dozen
No. 151—Adjustable for 12 to 16 in, Mowers....\$12.00
No. 156—Adjustable for 16 to 20 in, Mowers..., 14.00

The Non-Skid Bottom prevents the grass from slipping forward in the catcher.

Weight Per Dozen 40 Pounds. One Dozen in a Box.

# LAWN ROLLERS "DUNHAM" WATER WEIGHT



Roller Bearings, with No-Tip Scraper

Perfectly Round High Carbon Steel Axle, Steel Handle, Wood Grip, Smooth Rolling Surface. Electric Welded Roller makes the water section one solid drum.

Body and Ends Painted Green, Handle Red.

Nos	7
Diameter, Inches	24
Length, Inches 24	24
Approximate Weight Empty, Lbs 85	110
Filled with Water, Lbs 265	420
Each	23.00

Plain Bearings, without No-Tip Scraper

Otherwise Same General Description and Finish as Above. Each

No. 2—Diameter 14 in., Length 24 in., Weight Each Empty 68 Lbs., Filled with Water 175 Lbs...\$13.50

### SPRAYERS

#### PARAGON

Air chamber of the Paragon is of all brass and of sufficient capacity to insure steady spray of high pressure. All valves used are of the latest approved self-seating style, solid brass. Pump Cylinder cast of special metal. Heavy black iron containers heavily galvanized, galvanized agitator keeps solution thoroughly mixed. 16 sq. in. of strainer surface on end of suction pipe is automatically cleaned by agitator.



No. 1

Each No. 1-Capacity 6 Gallons, Complete with 5 ft. of Special Spray Hose, 5 ft. Pipe, 1 Mist Nozzle, 1 Steel Cap for Mist Nozzle, 1 Straight Spray Nozzle, Weight Each 40 Lbs. . \$17.50

One in a Crate.

No. 3

Mounted on a strong steel truck and easily wheeled to any desired place. A very popular outfit.

Each No. 3-Capacity 12 Gallons, Complete with 10 ft. Special Spray Hose, 7 1/2 ft. Extension Pipe, 1 Mist Nozzle, 1 Steel Cap, 1 Straight Spray, Wt. Each 63 Lbs. \$25.00

One in a Crate.



## LOWELL FOUNTAIN, COMPRESSED AIR



Devoid of complex or intricate parts, automatic and positive in action and simple in construction.

Brass Pump 1 % in, diameter by 12 in, long. Placed on outside of tank and detachable. Screws into a brass seat which contains brass ball check valve. Brass Automatic Brass Automatic Controlling Valve gives positive shut-off.

Automatic Agitation, Adjustable Shoulder Straps to accommodate operators.

Equipment consists of Funnel with Brass Strainer, 3 of % in. Spray Hose with Nozzle and proper connection and Spray Nozzle, which is curved so that by reversing it can be used for spraying under side of leaves.

Diameter 9 in., Height 13 in., Capacity 3 Gallons,

No. 110—Galvanized Steel, Aluminized...... \$ 8.00 No. 111-Brass, Polished and Lacquered...... 12.00 Shipping Weight Each 11 Pounds.

One in a Carton.

### SPRAYERS

### LOWELL BUCKET PUMP

Used in spraying trees, small fruits, shrubbery, etc., washing windows, automobiles, disinfecting, applying whitewash, fly oil, stock dip, etc.

Double Acting, discharging solution on both the up and down stroke.

Hollow Plunger Tube acts as an Air Chamber. A specially designed Nozzle is used with 3 ft. of 3% in, hose.

## All Working Parts Are of Brass

Each

No. 109-Height to Top of Malleable Iron Foot Rest 13 in., Handle of Malleable Iron, & in. Solid Bronze Ball Valves. 

Two in a Carton.

#### LOWELL BABY MIDGET



Plain Tin

Per Dozen

No. 122-Capacity 1/2 Pint, 3x2 3/4 in, Tank with 3/4 in. Can Screw, 11/4 x10 in. Pump Tube, Length Over All 15 1/2 in., Weight Per Dozen 9 Lbs....\$4.25 One Dozen in a Carton.

#### LOWELL CONTINUOUS



Plain IX Tin Per Dozen

No. 115-Capacity 1 Quart (Scant), 41/4 x41/2 in. Tank, with 34 in. Zinc Can Screw, 1 1/2 x13 1/2 in. Pump Tube, 1/4 in. Plunger Rod, Length Over All 19 1/2 in., Complete with 2 Spray Caps-One Straight and One Angle, Weight Per Dozen 17 Lbs. . . . . .

One Dozen in a Carton. LOWELL GRAND



Plain Tin Per Dozen

No. 104-Capacity 1 Quart, Tank 3 in. Diameter at Small End and 4 in. Diameter at Large End. 5% in. Long, 1½x19½ in. Pump Tube, Length Over All 22 1/2 in., Weight Per Dozen 18 Lbs... \$6.50 Has two short solution or spray tubes and is especially

adapted for field or garden. One Dozen in a Carton.

## LOWELL POWDER BLOWER



Plain Tin, Bright Red Enamel Finish. For Handling Powdered Disinfectants. Per Dozen

No. 108-Small End of Tank 3 in. Diameter, Large End 4 in. Diameter, Length 5 ¼ in., 2 in. Can Screw on Back End, ¼ in. Plunger Rod, 1 ½x 19 ½ in. Air Chamber, Length Over All 22 ½ One Dozen in a Carton.

## WATER HOSE

VIM



## Moulded, Two Braid

1n 300 Foot Coils.

Size, Inches	1	1 34	1 1/2
Weight Per 100 Feet, Lbs	48 1/2	71	82
Per Foot	\$0.30	.40	. 50

Fabric is braided from high grade cotton yarn, each strand running spirally the entire length of the hose, and the plies are separated from each other by layers of high grade rubber.

## GARDEN HOSE

MILO





Cut Shows Method of Wrapping Milo Garden Hose.

#### Moulded, Corrugated

Made of whole Seamless Tubes, and Braided Jackets vulcanized into one solid unit, producing a hose which does not kink, even when bent sharply, and having a heavy corrugated cover to resist wear over rough surfaces.

In "Milo" hose there are no plies to separate.

### With 34 in. Fittings

#### LEE CORRUGATED



#### Two Braid

The tube, plies and cover are all firmly held together with good friction which prevents any possible opening up or separation of the fabrics or the tube or the cover from the rest of the hose.

#### 25 and 50 Ft. Lengths, Coupled Lee Red, Corrugated

Wt. Per 50 Ft. Length, Lbs. Per Foot	36 12 ½ 80 . 17	56 15 .19	34 18 .21
Lee Black, (	Corrugated		
Size, Inches Wt. Per 50 Ft. Length, Lbs. Per Foot	12 ½ 12 ½ \$0.15	58 15 . 17	34 18 .19

We Recommend the Above Hose as Being of 1st Quality in Materials and Construction. It is Attractive and Durable and Will Give Absolute Satisfaction.

## HOSE CLAMPS

### SHERMAN BRASS



Tongue runs in channel. Uniform grip. Heavy shoulder. Stiff ears cannot pul! together at top, form perfect nut lock. Steel bolt and nuts.

## Heavy Wrought Brass, Rustproof Clear Through

	tose Sizes		
Size Hose, Inches and Ply	32-3	96-3	34 - 3
I. D. Open, Inches	48	1	1 &
Weight Per Gross, Lbs	5 %	.6	6 34
Per Dozen	\$0.60	. 60	. 60
One Gross	in a Box.		

#### Water Hose Sizes

Size Hose,	I. D.		Weight	
In. and	Open,	Gross in	Gross,	Per
Ply	Inches	Box	Lbs.	Dozen
1 -3	$1_{\gamma^{T_{G}}}$	1/2	18	\$2.00
1 -4	1 1 2	1/3	20	2.00
1 14-3	135	1/3	21	2.50
1 34 -4	1 13	1/3	23	2.50
11/2-3	1+8	1/4	3.0	3.00
1 1/2 -4	2 14	1/4	31	3.00

#### GALVANIZED STEEL



Made of Heavy Sheet Steel, and Galvanized by a Superior Process which effectaally Prevents Rust,

They are Strong and Serviceable and have lugs which engage the vise jaws, making it an easy matter to tighten the clamp onto the hose.

I. D.		Weight	
Open.	Gross in	Gross.	Per
Inches	Box	Lbs.	Dozen
7/8	1	5 1/4	\$0.40
1 1/8	1	7.34	.22
1 3%	1/2	13 %	. 86
1 7	1/2	13 7%	. 86
1 11	1/4	19 %	1.60
1 18	14	2034	1.60
2	3/4	221/4	1.94
2 1/8	14	22 1/2	1.94
	Open,	Open, Gross in	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

\*Garden Hose Sizes, Balance Water Hose.

#### IDEAL



#### Steel, Adjustable, Galvanized or Nickel Plated (Specify)

Size	Size Hose,		Size	Size Hose,	
Clamp,	I. D.	Per	Clamp,	I. D.	Per
In.	In. Ply	100	In.	In. Ply	100
96 94 36	$\frac{3}{8} - 2$	\$4.00	214	1.% -4	\$6.20
34	$\frac{1}{2} - 2$	4.00	2 36	2 -3	6.40
36	$\frac{1}{2} - 3$	4.10	2 1/2	2 -4	6.60
1	$\frac{1}{2} - 4$	4.30	256	2.14 - 3	6.80
1 1/6	34 - 3	4.50	234	$2\sqrt{4}-4$	7.00
1 34	$\frac{3}{4} - 4$	4.70	2 76	$2\frac{1}{2}-3$	7.20
1 %	1 -3	4.90	3	2.16-4	7.50
1 1/2	1 -4	5.00	3 14	$2\frac{\pi}{4} - 4$	7.60
1 %	1 1/4 -3	5.20	3 1/2	3 -4	7.80
134	$1\sqrt{4}-4$	5.40	3 %	$3^{-1}4 - 4$	8.00
1 3%	$1 \frac{1}{2} - 3$	5.60	4	$3\frac{1}{2}-4$	8.50
2	1 1/2-4	5.80	4 1/2	4 -4	9.00
21/8	134 - 3	6.00	One	Hundred in	a Box.

#### Assortments

Each

## HOSE COUPLINGS

SHERMAN



Heavy Wrought Brass, Natural Finish, Deep Corrugations, Double Knurled Flanged

No. 25E—Eastern Gauge

Size, Inches..... Per Dozen ..... 82.00 2.00 2.00 Average Weight Per Dozen 2 Pounds.



#### PERFECT CLINCHING

A perfect coupling that can be attached easily and securely with a hammer, makes a smooth, perfect joint that cannot leak.

	No. 100—Heavy Br	rass, H. P.	T.	
Size Hose,	Inches	16	94	34
Weight Pe	r Dozen, Lbs	2 %	3	3 1/2
		\$3.00	3.00	3.00
	One Dozen in D	isplay Box		

## HOSE MENDERS PERFECT CLINCHING

Whether the hose be old or new, thick or thin, it adjusts itself to it and makes a mend that cannot leak and will not pull apart. It leaves the hose as smooth as a new unbroken hose. Needs only a hammer to apply.



No. 20-Seamless Brass Tube, Galvanized Steel Clamps Size Hose, Inches..... 56 1 1/2 16 Weight Per Dozen, Lbs..... 1 36 1 16 \$1.20 1.20 1.20 Two Dozen in a Display Box.

COOPER



No. 15-Wrought Brass Tubing, 3 in. Long

No hose clamps required, easy to apply and will not wear out. Size Hose, Inches...... Weight Dozen, Lbs. . . . . . . . . . Per Dozen ..... \$1.00 1.00 One Dozen in a Box.

### HOSE NIPPLES CAST BRASS

No. 91-Male

Hose Thread One End, T	aper I. P.	T. the	
Other.			A WOUNT
Size, Inches	16	34	© MMM ™
Weight Per Dozen, Lbs	2 14	2 1/6	1 (100)
Per Dozen	\$3.00	3.00	
Onen Stock	AME TO SE		-



NO. O- MAILE MINE	i. c.man.c.		
Hose Thread Male End,	Taper	I.	P. T.
Female End.	- 600		
Size, Inches	1,6		34
Weight Per Dozen, Lbs	2 14		2 1/2
Per Dozen	\$3.00		3.00
Open Stock.			

No. 99-Male and Female

## HOSE ADAPTERS

CAST BRASS

For changing Pittsburgh to Eastern Gauge or Eastern to Pittsburgh Gauge.

Eastern Inside, Pittsburgh	
	Per Dozen
No. 1-% in Standard	\$3.00
Pittsburgh Inside, Eastern	Outside
No. 2-% in Standard	\$3.00
Weight Per Doz	en 2 Pounds.
Open S	tock.



### WATER THIEVES ROYLE ATTACHMENT



Permits attachment of hose when hose bibb or sill cock is not available. Attached by simply pushing the attachment on a plain bibb or faucet. The greater the pressure of water the tighter it will hold.

Suite of whiter the cities		THE REAL PROPERTY.	8.581
No. 55-Heavy Cast Brass, Finished,	Best	Rubber	Washer
For Bibb, Inches		36	%
Hose Thread, Inches		3/4	3/4
Weight Per Dozen, Lbs		4	5
Per Dozen		\$6.40	7.40
Open Stock.		-	

## HOSE WASHERS

### GOOD LUCK RUBBER

Tough, live, springy rubber that stays soft and holds firmly in place.

Per Dozen Boxes Good Luck—For ½, % and % in. Hose, 12 in a Box . . . . \$1.20

Two Dozen Boxes in a Counter Display Carton.



## HOSE NOZZLES RAIN KING



The only hose nozzle without moving parts to wear. clog, or give trouble. The different sprays are obtained by a new and unique principle. Throws more water farther than any other hose nozzle made.

Only a quarter turn of nozzle is necessary from one extreme to the other.

Selid Brass Per Dozen Rain King—Adjustable from a Long, Solid Stream to the Finest Mist Spray, Weight Each % Lbs. \$18.00 One in a Box.

#### ROSTON



Four Adjustments, Mist, Shower, Stream, Shut-Off Accurately made of but three parts. Extra heavy at outlet to withstand severe knocks caused by dropping nozzle on stone or brick walks. The shut-off is complete.

Cast Brass, Polished Per Doz Per Dozen Boston-% in. Thread, in Reality a 1 in. Nozzle,

Weight Per Dozen 6 Lbs......\$10.00 One Dozen in a Box.



Four Adjustments as Indicated on Cut Central control pin does not penetrate the discharge hole and reduce the force of the water or make the spray one-sided.

Made of wrought brass, no part cast, no sand holes. Double packed with all wool felt ring and asbestos graphite cord. Per Dozen

One Dozen in a Box.

7 1/2

14

## HOSE PIPES

SCREW TIP



No. 95-Cast Brass, H. P. T.

Size, Inches	1	×	÷			'n	+		×.	·	u.	34
Length, Inches	i	ï	×	,								6
Discharge, Inches								,	2			1/4
Weight Each, Lbs		,		,	v	v			,	c		1/3
Each		Ŷ										80.55

Open Stock.

## LAWN SPRINKLERS

WHIRLING FAIRY



The arms have no adjustment and cannot be twisted away from maximum spraying posi-

The head and two arms are formed from one piece Sheet Brass, with Beaded Brass Bottom, resulting in a strong, light, easy turning body.

Brass Body and Arms, Polished and Lacquered

Whirling Fairy-10 in. High, Brightly Enameled Non-Breakable Malleable Base, Weight Per Carton 

Two in a Box; Six Boxes in a Carton.



One-half Dozen in a Carton. GIANT RAIN KING

Has Four Nozzles with the same adjustment as the Standard. Will sprinkle a circle 90 ft, in diameter. Brass Nozzles, Sprinkler Arms, Bushings and Hand Wheel, Cast

Base, Iron Stem.

Painted Green Each Giant Rain King-4 ft. High, Spread of Arms 30 in., Weight Each 19 Lbs......\$12.50

One in a Carton.

#### PLUVIUS

Giant.

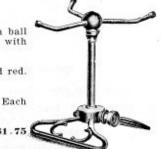
Head and arms revolve on ball bearings, permitting its use with very light water pressure.

Mounted on a sled. Head and stem are painted red.

Brass Arms

No. 207-Height About 11 in., Weight Per Dozen 35 Lbs. .....\$1.75

One in a Carton.



# LAWN SPRINKLERS

The best sprinkler of its type made; heavier and stronger than the others; perforations in the top are arranged to distribute water in the most thorough and effective manner.

RING

Stamped from Sheet Brass No. 25—Diameter 8 in., 1 1/2 in. High, Weight Per Dozen 10 Lbs. .80.85 Each in a Display Box; One Dozen in a Carton.

### HOSE REELS

REEL-EEZY

Compact, easy to handle and sturdy. Simply put the socket of a hose in the ring and roll along. Finished in Grass Green, Wrought Steel Welded Rims

No. 100-24 in Diameter, 9 in. Wide, Capacity 75 ft. % in. Garden Hose, or 100 ft. % in., Weight Each 71/2 .....82.50

#### ALL STEEL

Corrugated Galvanized Steel Drum. Black Japanned Frame, Electric Welded Joints Each

No. 10—Diameter of Wheels 21½ in., Diameter of Drum 9 in., Width Between Wheels 10 in, Length of Handle 28 in, Capacity 100 ft. of Garden Hose, Weight Each 16 Lbs. 83.00

No protruding pins or bolts to catch the clothing, injure the hands or wear the hose. Operated by tip-ping handle back to the ground.

One-half Dozen in a Crate, K. D.

### ALL STEEL

Designed for convenient reeling of the hose and storing it without kinking or cracking. Construction of drum enables air to circulate around the hose, thus thoroughly drying and preventing it from rotting.

Green Enameled Frame, Natural Finish, Galvanized Drum

No. 2—Capacity 100 ft. of ¾ in. Hose, ¾ in, x 16 Gauge Channel Steel Frame and Base, 8 in. Diameter Winding Drum of Corrugated Galvanized Iron with Rolled Edges, Weight ...82.50 Each 9 Lbs...... Two in a Bundle, K. D.

STYLE "B"

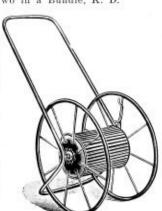
Absolutely all metal, tubular steel rims and frame, steel spokes and steel reel heads, corru-gated galvanized sheet steel drum.

Frame and Drum Head Enameled Green, Galvanized Drum

Each No. 20-Cap. 150 ft. % in. 3-Ply or 75 ft. 1 in. 4-Ply Hose, 24 in. Wheels, Weight Each 17 Lbs. . . . . . . . . . \$6.00

The frame can be tilted down to the ground and forms a stand on which the reel revolves.

One in a Bundle.





### SHOVELS

D HANDLE, SQUARE POINT



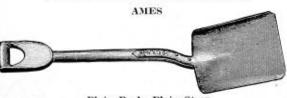
Plain Back, Socket Strap

#### DIAMOND

#### Plain Back, Socket Strap

Crucible Cast Steel, Black Finish, Hardwood Handle.

No.	402-Size	2.	Blade	. 9	% x11 %	in						 \$16.50
No.	403-Size	3,	Blade	10	14 x12 14	in						17.50
No.	404-Size	4,	Blade	10	% x12 %	in						18.00
	Aver	age	Weig	ht	Per Doze	n 63	Pe	u	n	ds	9	



Plain Back, Plain Strap

Best Crucible Cast Steel, Black Finish, Selected Hardwood Handle.

No. 170—Size 2, Blade 9 % x11 % in........\$28.00

Average Weight Per Dozen 70 Pounds.



Hollow Back, Socket Strap

#### SIMPSON

#### Hollow Back, Socket Strap

# Average Weight Per Dozen 70 Pounds. MOULDERS D HANDLE, SQUARE POINT



Plain Back, Socket Strap Crucible Cast Steel, Polished, Split D Handle.

No. 1928—Hubbard, Size 2, Blade 10x11¾ in... \$23.00 No. 4928—Diamond, Size 2, Blade 10x11¾ in... 19.00 Average Weight Per Dozen 56 Pounds. All Above, One-half Dozen in a Bundle.

### SHOVELS

#### D HANDLE, ROUND POINT

#### HUBBARD

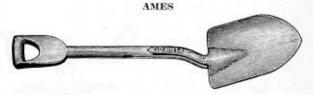


#### Plain Back, Socket Strap

Average Weight Per Dozen 63 Pounds.

#### DIAMOND

#### Plain Back, Socket Strap



## Plain Back, Plain Strap



### Hollow Back, Socket Strap

Best Crucible Cast Steel, Black Finish, Selected Hardwood Handle.

#### SIMPSON

## Hollow Back, Socket Strap

All Above, One-half Dozen in a Bundle.

## SHOVELS

### LONG HANDLE, SQUARE POINT

#### HUBBARD



### Plain Back, Socket Strap

Best Crucible Cast Steel, Black Finish, Selected Hardwood Handle.

			Per Dozen
No.	112-Size 2,	Blade 9 % x11 %	in\$21.00
No.	113-Size 3,	Blade 10 1/4 x12 1/4	in 22.00
No.	114-Size 4,	Blade 10 % x12 %	in 22.50
	Average	Weight Per Doze	en 66 Pounds.

### DIAMOND

#### Plain Back, Socket Strap

 Crucible Cast Steel, Black Finish, Hardwood Handle.
 Per Dozen

 No. 412—Size 2, Blade 9 % x11 % in.
 \$16.50

 No. 413—Size 3, Blade 10 % x12 % in.
 17.50

 No. 414—Size 4, Blade 10 % x12 % in.
 18.00

 Average Weight Per Dozen 66 Pounds.

#### HUBBARD



#### Hollow Back, Socket Strap

Best Crucible Cast Steel, Black Finish, Selected Hardwood Handle.

												Pe	er Dozen
No.	512-	-Size	2.	Blade	9 34	x11 %	in.						.\$20.00
No.	513-	Size	3,	Blade	10 1/4	x12 1/4	in						. 20.50
		Aver	age	Weig	ht P	er Do	zen	70	P	ou	nd	s.	

#### SIMPSON

## LONG HANDLE ROUND POINT

#### HUBBARD



#### Plain Back, Socket Strap

Best Crucible Cast Steel, Black Finish, Selected Hardwood Handle.

Per Dozen

									P	ar Do	zen
No.	132	-Size	2.	Blade	9 1/2 x12	in.				. \$21	.00
No.	133-	-Size	3,	Blade	9 % x12	1/2 in.				. 22	.00
		Avera	ge	Weig	ht Per	Dozen	66	Pound:	5.		

## DIAMOND

#### Plain Back, Socket Strap

All Above, One-half Dozen in a Bundle.

## SHOVELS

LONG HANDLE, ROUND POINT



#### Plain Back, Plain Strap

#### HUBBARD



### Hollow Back, Socket Strap

#### SIMPSON

#### Hollow Back, Socket Strap

### SPADES

## D HANDLE, SQUARE POINT



Plain Back, Socket Strap Per Dozen



Plain Back, Plain Strap

Per Dozen

No. 189—Ames, Size 2, Blade 7x12 in., Best Crucible Cast Steel, Black Finish, Selected Hardwood Handle, Average Weight Per Dozen 60 Lbs...\$28.00



Hollow Back, Socket Strap

Per Dozen

No. 842—Simpson, Size 2, Blade 7½x12 in., Crucible Cast Steel, Black Finish, Hardwood Handle, Average Weight Per Dozen 65 Lbs..... 16.00

All Above, One-half Dozen in a Bundle.

Nos.

## SPADES

LONG HANDLE, SQUARE POINT



Plain Back, Socket Strap Per Dozen No. 152—Hubbard, Size 2, Blade 7x12 in., Best Crucible Cast Steel, Black Finish, Selected Hardwood Handle, Average Weight Per Dozen .\$21.00 Cast Steel, Black Finish, Hardwood Handle, Average Weight Per Dozen 66 Lbs...... 22.00

> CONCRETE, LONG HANDLE SQUARE POINT



Plain Back, Socket Strap Per No. 152C—Hubbard, Size 2, Blade 7x12 in., Per-Per Dozen forated, Crucible Cast Steel Blade, Black Finish, Selected Hardwood Handle, Average Weight No. 1528C-8 ft. Handle...... 50.00

BOYS D HANDLE, SQUARE POINT



Strap Back, Riveted Per Dozen No. 491-Size 1, Width of Blade 6 1/2 in., Length of Blade 9 1/2 in., Black Finish, 23 in. D Handle. \$13.00

DITCHING D HANDLE principal distriction in

Hubbard Plain Back, Socket Strap Crucible Steel Blade, Black Finish, 5% in, Wide at Top, 6 1/2 in. Wide at Point, Selected Hardwood Handle. 183

Nos. . . . . . . . . . . . . . . Length Blade, Inches.... 16 18 Aver. Weight Per Dozen, Lbs... 58 62 Per Dozen ...... \$21.00 21.50



Plain Back, Socket Strap Crucible Steel Blade, Black Finish, 51/2 in. Wide at Top, 4% in. Wide at Point, Selected Hardwood Handle. Nos. Length Blade, Inches..... 16 18 Aver. Weight Per Dozen, Lbs... 60 62 Per Dozen ..... \$24.00 25.00

COAL SHOVELS



Hubbard D Handle Nos. 16103 16104 Size, Nos. . . . . . . . . . . . 1 Size Blade, Inches... 13 1/2 x14 14 x14 1/2 14 1/2 x15 15 x15 1/2 Size Blade, 1115.1. 60 Av. Wt. Dozen, Lbs. 60 \$22.50 62 64 67 23.00 23.50 24.00 Simpson, D Handle ...... 16401 Nos. . . . . . . 16402 16403 16404 \$18.50 Per Dozen 19.00 19.50 20.00 All Above, One-half Dozen in a Bundle.

## LOCOMOTIVE OR COAL SCOOPS

EASTERN PATTERN



#### Hollow Back, Socket Strap

Crucible Cast Steel, Black Finish, Hardwood Handle.

-545	Hubbar	d, D Handle	e	
Nos		7103	7104	7105
Size, Nos		3	4	5
Size Blade, Inches.		11 14 x 15 1/2		12 1/2 x16 1/2
Av. Wt. Doz., Lbs.	62	6.6	7.0	74
Per Dozen \$	22.00	22.50	23.00	23.50
Nos		7106	7108	7110
Size, Nos		6	8	10
Size Blade, Inches		13x17	13 % x18	15 14 x18 %
Av. Wt. Doz., Lbs		82	92	98
Per Dozen		\$24.00	24.50	26.00
	Simpson	, D Handle	e	
Nos	7400	7409	7404	7.405

74027403Per Dozen ..... \$18.00 18.50 19.00 19.50 7406 7408 7410 Per Dozen ...... \$20.00 20.5022.00



Hubbard, Long Handle 7112 ................ 7113 Size, Nos. . . . . . . . . . . . . . . .

7114

1810

22.00

1808

4 Size Blade, Inches..... 11x15 11 14 x 15 1/2 12x16 Av. Wt. Dozen, Lbs..... 64 68 7.2 Per Dozen ...... \$22.00 22.50 23.00

Simpson, Long Handle Nos. 7412 7413 7414 Per Dozen ...... \$18.00 18.50 19.00

EASTERN PATTERN



### Riveted Back, Socket Strap

Crucible Cast Steel, Black Finish, Hardwood Handle.

	D Handle	rawood 1	landie.
Nos	1503 3 11 ½ x15 ½ 84	4	100
Nos. Size, Nos. Size Blade, Inches. Av. Wt. Doz., Lbs. Per Dozen	6 12½x17 102	1508 8 13 ½ x18 110 24 . 50	10 15x18 % 115
Simpson, Nos 1802 Per Dozen \$18 00	1803	1804 19.00	1805 19.50

Per Dozen ..... \$20.00 20.50All Above, One-half Dozen in a Bundle.

1806

Nos. .....

## COAL AND COKE SHOVELS



Hollow Back, Socket Strap Crucible Cast Steel, Black Finish, Hardwood Handle,

bbard.		

Nos	6101	6102	6103	6104
Size, Nos	1	2	3	4
Size Blade, In	13 1/2 x14	14x14 1/2	14 1/2 x 15	15x15 1/2
Weight Dozen, Lbs	7.0	76	83	9.0
Per Dozen	\$22.50	23.00	23.50	24.00

#### Simpson, D Handle

Nos	6401	6402	6403	6404
Per Dozen	\$18.50	19.00	19.50	20.00



#### Hubbard, Long Handle

Nos	6111	6112	6113
Size, Nos	1	2	3
Size Blade, Inches	13 1/2 x 14	14x14 1/2	14 1/2 x15
Weight Dozen, Lbs	72	7.8	85
Per Dozen	\$22.50	23.00	23.50

#### Simpson, Long Handle

Nos	 6411	6412	6413
Per Dozen	 \$18.50	19.00	19.50

## FURNACE SCOOPS D HANDLE



Hollow Back, Socket Strap Per Dozen No. 940F-Special, Size 9 1/4 x15 in., Crucible Steel Blade, Black Finish, Weight Per Dozen 60 Lbs. \$16.00

#### LONG HANDLE



Hollow Back, Socket Strap Per Dozen No. 950F-Special, Size 9 1/4 x14 in., Crucible Steel Blade, Black Finish, Weight Per Dozen 60 Lbs. \$16.00

### POTATO SCOOPS CHAMPION



Riveted Back, Socket Strap, Wood D Handle

Per Dozen No. 25-13x16 in. Scoop, Tinned Wire with Galvanized Steel Sides, Length Handle 27 in ..... \$36.00 Weight Per Dozen 75 Pounds,

All Above, One-half Dozen in a Bundle.

## TELEGRAPH SHOVELS HUBBARD



## Plain Back, Socket Strap

Crucible Cast Steel Blade, Black Finish, Selected Hardwood Bent Handle.

No. 80A-9 4x11 % in., 9 in. Strap, Length of Handle 8 Feet......\$48.00

One-half Dozen in a Bundle,

## TELEGRAPH SPOONS

#### HUBBARD



Plain Back, Socket Strap

Crucible Cast Steel Blade, Black Finish, Selected Hardwood Handle.

No. S80A-Length of Strap 9 in., Length of Handle 8 Feet ......\$48.00

One-half Dozen in a Bundle.

## SNOW SHOVELS

#### FLYING DUTCHMAN



Blade is corrugated and stiffened with angle steel ribs or braces riveted to handle and blade. Blade is reinforced by a rod enclosed in the edges and has an extra heavy ribbed, steel shoe.

#### Heavy Galvanized Blades

Per Dozen

No. 33-21x16 in. Blade, Black Iron "D" Top, Hardwood Varnished Handle, Weight Dozen 61 Lbs. \$17.50

One-half Dozen in a Bundle,

#### GOOD LUCK



Handle is bent to fit the curves of blade. Steel rod enclosed in edges for reinforcing.

#### Galvanized Steel Blade

Per Dozen

No. 34-17x16 in. Blade. Ribbed Steel Shoe, Hardwood Split D Handle with Round Corners, Wt. 

One-half Dozen in a Bundle.

## SIDEWALK CLEANERS



Solid Steel, Medium Weight, Black Finish

Per Dozen

One Dozen in a Bundle.



Solid Steel, Extra Heavy Blades, Black Finish

Per Dozen

No. SSC-Solid Socket, Double Bead, Blades 6 in. Deep, 4 1/2 ft. Selected Handle, Weight Per ......\$12.00 Dozen 43 Lbs.. One Dozen in a Bundle.

### SNOW PUSHERS

## CHAMPION

Built for heavy duty, braced blade permits severest strain. Turns snow or dirt like a plow. Also an excellent barn and street cleaner. Scrapes floors and cement surfaces

16 Gauge Spring Steel Blade

Per Dozen No. 125-Blade 18 in. Wide, 8 in. Deep, No. 1 Quality Handle Set in a Malleable Socket, Wt. Per Dozen 60 Lbs. .....\$18.00

Three in a Bundle,

## SNOW PLOWS

PRENTICE



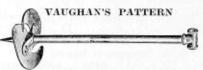
20 Gauge Steel Head with Iron Brace

Per Dozen No. 21-Correct Form, Angle, Bracing, Proportions and Hang, Long Hardwood Handle, Weight Per Dozen 65 Lbs. One-half Dozen in a Bundle.

## POST HOLE AUGERS IWAN



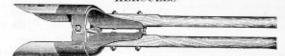
Crucible Steel Blades, Tempered and Polished, Malleable Iron Arch, Steel Pipe Handle, Wood Cross Bar ¾ in. Pipe Handle, 22 in. Cross Bar, 48 in. Long Over All. 50 80 Size, Inches ...... 4 5 6 8 Weight Dozen, Lbs... 84 Per Dozen ..... \$28.00 112 9.0 101 28.00 28.00 30.00 One-quarter Dozen in a Bundle.



Forged Steel Blades, Steel Pipe Handle, Malleable Iron Top

and Point, Painted Black, without Cross Bars
49 in. Long Over All, 44 in. Handle, % in. Diameter,
Point Underneath Blade 3% in. Long, 1% in. Hole at Top. hes . . . . . 4 5 6 7 8 5 a 8 Weight Dozen, Lbs. . . 52 48 56 5.7 58 Per Dozen ...... \$24.00 24.00 24.00 24.00 24.00 One-quarter Dozen in a Bundle.

### POST HOLE DIGGERS HERCULES



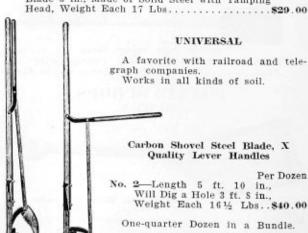
Per Dozen Hercules-5x9 in. High, Carbon Steel Blades, Mal-

leable Iron Castings, 1%x48 in. Round Handles with Square Butts, Weight Per Dozen 

Castings are bolted together from the outside, with bolt passing through the digger, instead of being joined in the center, making a stronger and more rigid tool. One-sixth Dozen in a Bundle.

### IRON CITY

No. 88—Length 6 ft., Diameter 1 in., Width of Blade 3 in., Made of Solid Steel with Tamping



## WHEELBARROWS

STONE



Bent Handle, Solid Bottom, Well Painted and Bolted

#### RAILROAD OR GENERAL PURPOSE



Constructed of Seasoned Oak, Ash and Hickory

Pittsburgh—Capacity 2 Cubic Feet, Width at Top Front 20 ¼ in., Width at Top Back 23 ¾ in., Depth at Handles 5 ¼ in., Depth at Wheel 7 in., 1 ½ x 2 x 60 in. Handles, Mortised Corners Reinforced with Metal Cleats, Weight Each 40 Lbs.. \$4.00



Seasoned Wood, Painted Red, Green Inside, Striped and Varnished

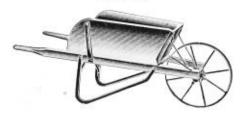
#### BOYS GARDEN



Seasoned Wood, Painted Red, Striped and Varnished, Wheel Painted Black

## WHEELBARROWS

GARDEN



Painted Red, Green Inside, Striped and Varnished

Large Size, Extra Strong, for Stable, Farm and Mill use.

#### LIGHT GENERAL USE



Steel Tray without Seam or Lap, Hardwood Handles and Legs, Well Braced and Bolted

Each

#### BULLFROG, CONTRACTORS



Hardwood Handles, Angle Iron Legs, Well Braced and Bolted, with Wood Riser

One in a Bundle, Knocked Down.

## WHEELBARROWS

#### BULL FROG CONCRETE AND MORTAR



#### All Parts Neatly Painted

Narrow deep stamped tray, especially designed for pouring concrete and in narrow spaces.

One in a Bundle, Knocked Down.

#### BULL FROG CONCRETE



Equipped with angle iron wheel guard loop, which strengthens the frame and permits of forward dumping. Angle iron risers underneath tray elevate front end of tray so that in wheeling the tray stands level.

#### Angle Iron Cross Pieces

Each

One in a Bundle, Knocked Down.

#### BUCKEYE TUBULAR



Double bend in frame places wheel under load. Handles are of 1 in. tubing bent around the front of the wheel which permits forward dumping.

#### One-Piece Stamped Steel Tray, Beaded Top Edge

No. 19—Capacity 8 cu. ft., 16 Gauge Steel Tray, Size 49x40 in. on Top, 24 in. Deep at Wheel, 14 in. Deep at Handles, Weight Each 100 Lbs.. \$19.75

One in a Bundle, Knocked Down.

## WHEELBARROWS

BULL FROG TUBULAR



Wheel is placed under load due to double bend in frame.

Handles are of 1 in. tubing bent around in front of wheel which permits forward dumping. Angle iron legs well braced and bolted to frame.

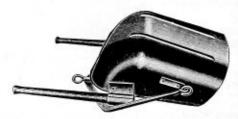
#### One-Piece Stamped Steel Tray, Beaded Top Edge

Nos	4	5	10
Gauge of Steel	14	14	13
Length of Top, Inches	32	37	421/2
Width at Top, Inches	28	29 1/2	33 1/2
Depth at Wheel, Inches	7	9	11 1/2
Depth at Handle, Inches	5	6 1/2	8
Capacity, Cu. Ft	3	4	6
Weight Each, Lbs		75	100
Each	\$11.75	12.00	15.50

One in a Bundle, Knocked Down.

## DRAG SCRAPERS

MAUMEE



With Runners, Riveted On

Bowl is pressed from a single sheet of high carbon scraper steel, without lap or seam. Will scour perfectly in any kind of soil.

Sides at front are not sheared off, but carried up on a line with the top. This prevents dirt spilling on the haul and wear on the point when returning from the dump.

Flanges stiffen the bowl. Bail is made of solid forged steel and will stand great strain. Malleable iron swivel turns freely. Heavy steel hooks and handle sockets. Runners are made of special hardened steel and handles are of selected hardwood.

Nos	1	2
Capacity, Cu. Ft	7	5
Size of Bowl, Inches	34x33x10	32x30x9 1/2
Approx. Weight Each, Lbs	87	84
Each	\$12.50	12.00

# SOME OF THE SPECIAL FEATURES OF THE "BULL FROG" WHEELBARROWS

"Never-Break" Wheels, Rivetless Malleable Hub, Grease Pocket in Hub for Lubrication, Angle Iron Legs Running Back on Handles Adding to the Strength.

## HAND OF MORTISE LOCKS

OUTSIDE

OUTSIDE





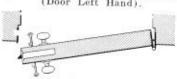
Left Hand Reverse Bevel Lock If Operated by Key from Outside Only. (Door Right Hand),



Right Hand Lock (Door Right Hand).



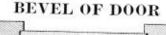
Right Hand Reverse Bevel Lock If Operated by Key from Outside Only. (Door Left Hand).



OUTSIDE

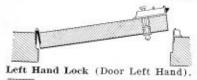
Right Hand Lock If Key Functions are the Same from Both Sides, Otherwise If Key Functions are the Same from Both Sides, Otherwise (Door Right Hand).

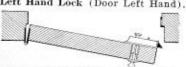
Right Hand Reverse Bevel Lock. (Door Left Hand).



The standard bevel of the fronts of mortise locks which are not reversible is 1/8 inch in two inches, to conform to the bevel of the edge of the door.

## HAND OF RIM LOCKS





Left Hand Reverse Bevel Lock (Door Right Hand).

OUTSIDE



Right Hand Reverse Bevel Lock (Door Left Hand).

## BOOK CASE OR CUPBOARD

OUTSIDE



Left Hand Lock (Door Left Hand).

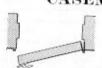
OUTSIDE

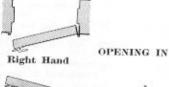
Right Hand Lock (Door Right Hand).

## CASEMENT WINDOWS

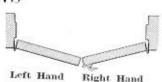
OPENING OUT







Right Hand





Left Hand

Right Hand

Left Hand



## DESCRIPTION OF FINISHES

On Hardware Manufactured by P. & F. Corbin Specify Finish by Prefixing Symbol to Number.

For Cast and Wrought Bronze

B-Natural Color, Polished, HB-Statuary Light.

SHB-Statuary Light, Sanded. E-Nickel Plated, Polished.

A—Natural Color, Polished. EA—Natural Color, Dull.

DE-Nickel Plated, Dull. HPE-Imitation\_Half-Polished Iron.

R-Antique Copper.

For Cast and Wrought Brass

SKA—Oxidized and Relieved, Sanded. 2A—Oxidized and Relieved, Sanded, Edges and High

Parts Polished.

KA-Oxidized and Relieved

Ornamental Goods).

(Suitable Only for

For Steel and Iron

Amber, Coppered, Japanned, Galvanized, Dead Black and White Enamel Finishes are furnished only on Articles so described in this Catalog and are applied to Unpolished Surface.

Unpolished Plated Finishes are furnished only on Articles so indicated in this Catalog by the Letter "T" Prefixed to the Number.

EA-Brass Plated, Dull.

KA-Brass Plated, Oxidized and Relieved. Suitable Only for Ornamental Goods.

SKA-Brass Plated, Oxidized and Relieved, Sanded.

2A—Brass Plated, Oxidized and Relieved, Sanded, Edges and High Parts Polished.

N-Bronze Plated, Polished.

C-Coppered.

TY-Amber.

On Hardware Manufactured by Stanley Works Specify Finish by Affixing Symbols to Numbers.

A—Standard Light Bronze.

D2-Copper Oxidized, Light Mottled.

SF4-Dull Brass, Slightly Oxidized, Sanded.

N-Nickel Plated.

F-Dull Brass.

HB-Bronze Plated, Statuary Light,

SHB—Bronze Plated, Statuary Light, Sanded. E—Nickel Plated, Polished. DE—Nickel Plated, Dull.

R-Antique Copper.

F-Genuine Rustless Iron.

KF-Imitation Rustless Iron.

G-Electro Galvanized.

J—Japanned.

C-Brass Plated.

G-Bower Barff.

-Japanned.

H-Dead Black, Electro-Plate.

R—Galvanized.

#### COMPARATIVE SYMBOLS OF LEADING HARDWARE MANUFACTURERS

Joseph Woodwell Co.	P. & F. Corbin	Stanley Works	Russell & Erwin	Yale & Towne	Sager Lock Co.	Sargent & Co.	Reading Hardware Co	U. S. Standard
B or N	B or N	A	11	BZ10	A20	P	1	US 9
HB	HB	B8	2	BY65	D29	A	221	US20
SHB	SHB	SB8	02		S29	RA	223	US21
E	E	N	4	NZ10	A50	N	80	US14
DE	DE	N5	14	NY10	D50	LN	77	US15
HPE	HPE		6 1/2	NX56		HF		U. S. Special
R	R	D2	7 1/2	CZ19	A42	AB	24	US8
A	A	C	10	AZ10	A30	В	31	US3
EA	EA	F	9	AY22	D30	OB	37	US4
KA	KA	F4	9 C	AY21	D31	OE	371	US5
SKA	SKA	SF4	09C	AX28	S31	RD	331	US6
2 A	2 A		09B		HS31	R7D	333	US7
TY	TY		K		011	T	10	
F	F	G	46	FX80	17	BB	087	US18
KF	KF	H	0.6	FX90	18	BN	0871/2	US19
G	G	R	G	**********	012		GL	US2
J	J	J	J		010		J	US1B

## OPERATION OF LOCKS

#### Unit Front Door Locks

Operated-Latch bolt by knob from either side, both bolts by key from the outside at all times. Stop in face locks the outside knob. Dead bolt is locked from inside by thumb knob.

## Unit Vestibule Door Locks

Operated-By knob from either side and by key from the outside at all times. Stop in face locks the outside knob.

#### Cylinder Front Door Locks

Operated-Latch bolt by knob from either side, both bolts by key from the outside at all times; dead bolt by thumb knob from the inside. Outside knob is locked by stop in face, one key operates both bolts.

#### Cylinder Vestibule Door Locks

Operated-By knob from either side and by key from the outside at all times. Outside knob is locked by stop in face.

#### Bitted Key Front Door Locks

Operated-Latch bolt by knob from either side. Outside knob is locked by stop in face. Dead bolt by key from inside, and both bolts by key from outside at all times.

#### Bitted Key Vestibule Door Locks

Operated-By knob from either side and by key from the outside at all times. Outside knob is locked by stop in face.

Sliding Door Locks

Operated-By key and flush cup escutcheons from either side. Rim Knob Locks

Operated-By knob and Key from either side. Rim Knob Latches

Operated-By knob from either side. Thumb bolt by slide from inside.

Rim Night Latches

Operated—By key from outside and by thumb from inside. Latch bolt is fastened back by stop in face, or in some cases by turning thumb knob.

Rim Dead Locks

Operated by key from outside and by thumb knob from inside; in some cases keys from both sides. Mortise Knob Locks

Operated—By knob and key from either side.

Mortise Knob Latches

Operated-By knob from either side.

Mortise Night Latches

Operated-By key from outside and by knob from inside. Latch bolt is fastened back by stop in face.

Mortise Dead Locks

Operated-By key from either side; in some cases thumb knob from inside.

Store Door Locks

Operated-Latch bolt by thumb piece from either side; dead bolt by key from either side.

## SECTIONAL FRONT DOOR HANDLE SETS

Handle on Outside, Knob, Rose, and Thumb Piece on Inside, with Lock



Cut shows No. 1349 ½ Lock applied to door, with sectional type door handle for outside and knob and escutcheon on inside.



Outside of Door.



Inside of Door.

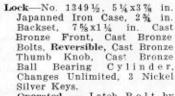
Either a knob or escutcheon or a knob and rose with a separate thumb turn can be used.

## BALL BEARING CYLINDER LOCKS

ST. IVES DESIGN

Cast Bronze

Dor Sot



Operated — Latch Bolt by Thumb Piece from Outside and Knob from Inside Except when Outside Thumb Piece is Set by Stop in Face of Lock, Dead Bolt by Thumb Knob from Inside and Both Dead Bolt and Latch Bolt by Same Key from Outside at All Times.

Handle—One No. 85084, Size 10 % x2 % in., 3x3 in. Cylinder Collar, for Outside.

Knob—One No. 240½, Octagon Pressed Glass, Size 2¼ in., Cast Bronze Rose, for Inside.

Thumb Knob — One No. 2145, with 1 % x1 % in. Plate, for Inside.

Weight Per Set 6 Pounds. One Set in a Box, with Screws.



Cast Bronze

Per Set

No. SHB942880xEA240 ½
—Statuary Bronze,
Light, Sanded Outside
and Dull Brass, Natural
Color Inside......\$21.75

Lock—No. 1349½, 5¼x3¾ in. Japanned Iron Case, 2¾ in. Backset, 7%x1¼ in. Cast Bronze Front, Cast Bronze Bolts, Reversible, Cast Bronze Thumb Knob, Cast Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

Operated—Latch Bolt by Thumb Piece from Outside and Knob from Inside, Except when Outside Thumb Piece is Set by Stop in Face of Lock, Dead Bolt by Thumb Knob from Inside, and Both Dead Bolt and Latch Bolt by Same Key from Outside at All Times.

Handle—One No. 94284, 7 ½ in. from Center to Center of Grip, 5 ¾ x2 ¼ in. Top Plate, 3 ½ x 2 ½ in. Bottom Plate and Cylinder Collar, for Outside.

Knob—One No. 240½, Octagon Pressed Glass, Size 2¼ in., Cast Bronze Rose, for Inside.

Thumb Knob—One No. 2145. with 15%xl 1% in. Plate, for Inside.

Weight Per Set 71/2 Pounds. One Set in a Box, with Screws.



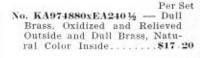


## SECTIONAL FRONT DOOR HANDLE SETS

Handle on Outside, Knob, Rose and Thumb Piece on Inside, with Lock

BALL BEARING CYLINDER LOCKS

Cast Bronze



Leck—No. 1349 ½, 5 ¼ x3 % in. Japanned Iron Case, 2 % in. Backset, 7 % x1 ¼ in. Cast Bronze Front, Cast Bronze Bolts, Reversible, Cast Bronze Thumb Knob, Cast Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

Operated—Latch Bolt by Thumb Piece from Outside and Knob from Inside Except when Outside Thumb Piece is Set by Stop in Face of Lock, Dead Bolt by Thumb Knob from Inside and Both Dead Bolt and Latch Bolt by Same Key from Outside at all Times.

Handle—One No. 97484, 5 % in. from Center to Center of Grip, 3 ½ x2 in. Top Plate, Bottom Plate and Cylinder Collar for Outside.

Knob—One No. 240½, Octagon Pressed Glass, Size 2¼ in., Cast Bronze Rose, for Inside.

Thumb Knob—One No. 2145, with 1%x1% in. Plate, for Inside. Weight Per Set 6 Pounds.

One Set in a Box, with Screws.



Per Set
No. KA785880xEA240½ — Dull
Brass, Oxidized and Relieved
Outside and Dull Brass, Natural Color Inside......\$17.20

Lock—No. 1349 ½, 5 ¼ x3 % in. Japanned Iron Case, 2 ¾ in. Backset, 7 ½ x1 ¼ in. Cast Bronze Front, Cast Bronze Bolts, Reversible, Cast Bronze Thumb Knob, Cast Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

Operated—Latch Bolt by Thumb Piece from Outside and Knob Inside Except when Outside Thumb Piece is Set by Step in Face of Lock, Dead Bolt by Thumb Knob from Inside and Both Dead Bolt and Latch Bolt by Same Key from Outside at all Times.

Handle—One No. 78584, 5¾ in. from Center to Center of Grip, 2½ in. Top Plate, 2 in. Bottom Plate. 2½ in. Cylinder Collar for Outside.

Knob—One No. 240½, Octagon Pressed Glass, Size 2¼ in., Cast Bronze Rose, for Inside.

Thumb Knob—One No. 2145, with 1%x1% in. Plate, for Inside. Weight Per Set 6 Pounds.

One Set in a Box, with Screws.



Cast Bronze

Per Set No. EA755880xEA1419PY—Dull Brass, Natural Color....\$17.20

Lock—No. 1349 ½, 5 ½ x3 % in. Japanned Iron Case, 2 ¾ in. Backset, 7 ½ x1 ½ in. Cast Bronze Front, Cast Bronze Bolts, Reversible, Cast Bronze Thumb Knob, Cast Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

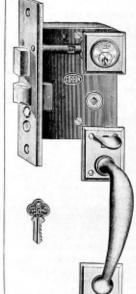
Operated—Latch Bolt by Thumb Piece from Outside and Knob Inside, Except when Outside Thumb Piece is Set by Stop in Face of Lock, Dead Bolt by Thumb Knob from Inside and Both Dead Bolt and Latch Bolt by Same Key from Outside at all Times.

Handle—One No. 75584, 6% in. from Center to Center of Grip, 2%x2% in. Top Plate, 2½x2% in. Bottom Plate and Cylinder Collar, for Outside.

Knob—One No. 1419PY, Wrought Bronze, Size 21/4 in., Wrought Bronze Rose, for Inside.

Thumb Knob—One No. 2145, with 1 %x1 % in. Plate, for Inside. Weight Per Set 5 % Pounds.

One Set in a Box, with Screws.



Cast Bronze

Per Set No. EA753878xEA1419PY—Dull Brass, Natural Color...,\$16.65

Lock—No. 1349 ½, 5 ½ x3 % in. Japanned Iron Case, 2 % in. Backset, 7 % x1 ¼ in. Cast Bronze Front, Cast Bronze Bolts, Reversible, Cast Bronze Thumb Knob, Cast Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

Operated—Latch Bolt by Thumb Piece from Outside and Knob Inside Except when Outside Thumb Piece is Set by Stop in Face of Lock, Dead Bolt by Thumb Knob from Inside, and Both Dead Bolt and Latch Bolt by Same Key from Outside at all Times.

Handle—One No. 75382, 5% in. from Center to Center of Grip, 2½x2 in. Top Plate, 2x2 in. Bottom Plate and Cylinder Collar, for Outside.

Knob—One No. 1419PY, Wrought Bronze, Size 2¼ in., Wrought Bronze Rose, for Inside.

Thumb Knob—One No. 2145, with 1%x1½ in. Plate, for Inside. Weight Per Set 5¾ Pounds.

One Set in a Box, with Screws.

## SECTIONAL STORE DOOR HANDLE SETS

Two Handles, One for Each Side of Door, with Lock

#### BALL BEARING CYLINDER LOCKS



Cast Bronze

Per Set

No. SHB942994 — Statuary Bronze, Light, Sanded..\$30.90

Lock—No. 0288, 5x3 ¾ in. Japanned Iron Case, 2 ¾ in. Backset, 7 ¾ x1 ½ in. Cast Bronze Front, Cast Bronze Bolts, Anti-Friction Latch Bolt, Reversible, 2 Cast Bronze Cylinders, Changes Unlimited, 3 Nickel Silver Keys.

Operated—Latch Bolt by Thumb Piece from Either Side, Dead Bolt by Key from Either Side.

Handles—Two No. 94284, 7½ in. from Center to Center of Grips, 5%x2¾ in. Top Plates, 3½x 25 in. Bottom Plates and Cylinder Collars.

Weight Per Set 10 Pounds.

One Set in a Box, with Screws.



Cast Bronze

Per Set

No. KA901994—Dull Brass, Oxidized and Relieved., \$30.00

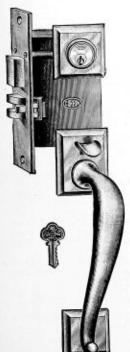
Lock—No. 0288, 5x3 % in. Japanned Iron Case, 2 % in. Backset, 7 % x1 % in. Cast Bronze Front, Cast Bronze Bolts, Anti-Friction Latch Bolt, Reversible, 2 Cast Bronze Cylinders, Changes Unlimited, 3 Nickel Silver Keys.

Operated—Latch Bolt by Thumb Piece from Either Side, Dead Bolt by Key from Either Side.

Handles—Two No. 90184, 9 in. from Center to Center of Grips, 3½x2½ in. Top Plates, 3x2½ in. Bottom Plates and Cylinder Collars.

Weight Per Set 9 1/2 Pounds.

One Set in a Box, with Screws.



## Cast Bronze

Per Set

No. EA753994—Dull Brass.

Natural Color . . . . . . . . \$25.65

Lock—No. 0288, 5x3 % in., Japanned Iron Case, 2 % in. Backset, 7 % x1 % in. Cast Bronze Front, Cast Bronze Bolts, Anti-Friction Latch Bolts, Reversible, 2 Cast Bronze Cylinders, Changes Unlimited, 3 Nickel Silver Keys.

Operated—Latch Bolt by Thumb Piece from Either Side, Dead Bolt by Key from Either Side.

Handles—Two No. 75384, 7½ in. from Center to Center of Grips, 3x2¼ in. Top Plates, 2x2 in. Bottom Plates, 2¼x2¼ in. Cylinder Collars.

Weight Per Set 8 % Pounds. One Set in a Box, with Screws.



Cast Bronze

Per Set

No. KA785994—Dull Brass, Oxidized and Relieved . \$22.20

Lock—No. 0288, 5x3 % in. Japanned Iron Case, 2 % in. Backset, 7 % x1 % in. Cast Bronze Front, Cast Bronze Bolts, Anti-Friction Latch Bolt, Reversible, 2 Cast Bronze Cylinders, Changes Unlimited, 3 Nickel Silver Keys.

Operated—Latch Bolt by Thumb Piece from Either Side, Dead Bolt by Key from Either Side.

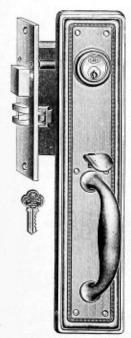
Handles—Two No. 78584, 5% in. from Center to Center of Grips, 2½ in. Top Plate, 2 in. Bottom Plate, 2½ in. Cylinder Collar.

Weight Per Set 71/4 Pounds. One Set in a Box, with Screws.

## STORE DOOR HANDLE SETS

Two Handles, One for Each Side of Door, with Lock

#### BALL BEARING CYLINDER LOCKS



#### Wrought Bronze

Per Set
No. 2A725990—Sanded Brass,
Oxidized and Relieved, High
Lights Polished......\$18.35

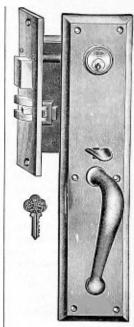
Lock—No. 0288, 5x3¾ in. Japanned Iron Case, 2¾ in. Backset, 7¾x1⅓ in. Cast Bronze Front, Cast Bronze Bolts, Anti-Friction Latch Bolt, Reversible, 2 Cast Bronze Cylinders, Changes Unlimited, 3 Nickel Silver Keys.

Operated—Latch Bolt by Thumb Piece from Either Side, Dead Bolt by Key from Either Side.

Handles—Two No. 72580, 5¼ in. from Center to Center of Grips, 15x3¼ in. Plates.

Weight Per Set 8 1/4 Pounds.

One Set in a Box, with Screws.



## Wrought Bronze

No. EA702991—Dull Brass, Natural Color..... 17.20

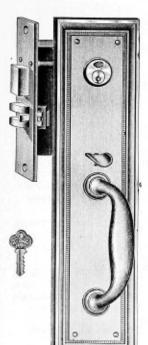
Lock—No. 0288, 5x3 % in. Japanned Iron Case, 2 % in. Backset, 7 % x1 % in. Cast Bronze Front, Cast Bronze Bolts, Anti-Friction Latch Bolt, Reversible, 2 Cast Bronze Cylinders, Changes Unlimited, 3 Nickel Silver Keys.

Operated — Latch Bolt by Thumb Piece from Either Side, Dead Bolt by Key from Either Side.

Handles—Two No. 70281, 5 1/8 in. from Center to Center of Grips, 14 1/2 x3 1/8 in. Plates.

Weight Per Set 7 1/2 Pounds.

One Set in a Box, with Screws.



## Cast Bronze

No. KA779990—Dull Brass, Oxidized and Relieved... \$31.00

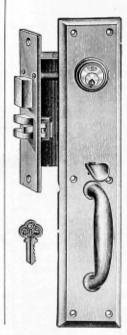
Lock—No. 0288, 5x3 % in. Japanned Iron Case, 2 % in. Backset, 7 %x1 % in. Cast Bronze Front, Cast Bronze Bolts, Anti-Friction Latch Bolt, Reversible, 2 Cast Bronze Cylinders, Changes Unlimited, 3 Nickel Silver Keys.

Operated — Latch Bolt by Thumb Piece from Either Side, Dead Bolt by Key from Either Side.

Handles—Two No. 77980, 5 ¼ in. from Center to Center of Grips, 16x4 in. Plate.

Weight Per Set 10 Pounds.

One Set in a Box, with Screws.



#### Cast Bronze

No. B302990—Polished Bronze. .....\$25.55

Lock—No. 0288, 8x3 % in. Japanned Iron Case, 2 % in. Backset, 7 % x1 % in. Cast Bronze Front, Cast Bronze Bolts, Anti-Friction Latch Bolt, Reversible, 2 Cast Bronze Cylinders, Changes Unlimited, 3 Nickel Silver Keys.

Operated—Latch Boltby Thumb Piece from Either Side, Dead Bolt by Key from Either Side.

Handles—Two No. 30282, 5¼ in. from Center to Center of Grips, 15x3 in. Plates.

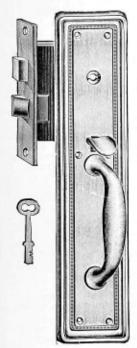
Weight Per Set 9 1/4 Pounds.

One Set in a Box, with Screws.

## STORE DOOR HANDLE SETS

Two Handles, One for Each Side of Door, with Lock

#### BIT KEYED LOCKS



#### Wrought Bronze

Per Set No. 2A725952—Sanded Brass, Oxidized and Relieved, High Lights Buffed....\$11.75

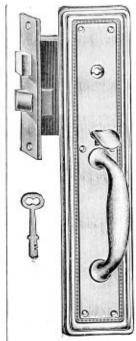
Lock—No. 0186½,4½x3¾ in. Japanned Iron Case, 2¾ in. Backset, 6½x1 in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 4 Tumblers, 36 Changes, 2 Nickel Plated Steel Keys.

Operated—Latch Bolt by Thumb Piece from Either Side, Dead Bolt by Key from Either Side.

Handles—Two No. 72580, 5¼ in. from Center to Center of Grips, 15x3¼ in. Plates.

Weight Per Set 61/2 Pounds.

One Set in a Box, with Screws.



## Wrought Steel

Per Set

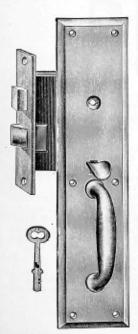
Lock—No. 0386½, 4½x3¾ in. Japanned Iron Case, 2¾ in. Backset, 6½x1 in. Cast Iron Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 4 Tumblers, 36 Changes, 2 Nickel Plated Steel Keys.

Operated—Latch Bolt by Thumb Piece from Either Side, Dead Bolt by Key from Either Side.

Handles—Two No. 62580, 5 ¼ infrom Center to Center of Grips, 15x3 ¼ in. Plates.

Weight Per Set 6 1/2 Pounds.

One Set in a Box, with S rews.



#### Wrought Bronze

No. R702952—Antique Copper, Polished . . . . . . . \$10.55

No. EA702952—Dull Brass, Natural Color . . . . . . . 10.55

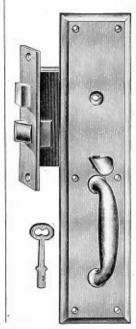
Lock—No. 0186½, 4½x3¾ in. Japanned Iron Case, 2¾ in. Backset, 6½x1 in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 4 Tumblers, 36 Changes, 2 Nickel Plated Steel Keys.

Operated—Latch Bolt by Thumb Piece from Either Side, Dead Bolt by Key from Either Side.

Handles—Two No. 70280, 4% in. from Center to Center of Grips, 14½x3½ in. Plates.

Weight Per Set 5 1/2 Pounds.

One Set in a Box, with Screws.



## Wrought Steel

Per Set

No. R602932—Antique Copper, Polished......\$6.35

No. EA602932—Dull Brass, Natural Color...... 6.35

Lock—No. 0386½, 4½x3¾ in. Japanned Iron Case, 2¾ in. Backset, 6½x1 in. Cast Iron Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 4 Tumblers, 36 Changes, 2 Nickel Plated Steel Keys.

Operated—Latch Bolt by Thumb Piece from Either Side, Dead Bolt by Key from Either Side.

Handles—Two No. 60280, 4% in. from Center to Center of Grips, 14½x3½ in. Plates.

Weight Per Set 51/2 Pounds.

One Set in a Box, with Screws.

## \*CORBIN UNIT LOCK SETS

The Corbin Unit Lock is assembled at the factory in one piece, with knobs and escutcheons attached. shipped as a unit and applied to the door as a unit. In this way the fine and accurate adjustments of the skilled lockmakers are never disturbed. The fact that the adjustments are undisturbed makes it possible to introduce features which otherwise could not be adopted. The result is a superior type of mechanism, a smoothness of action, a freedom from trouble, and a degree of security which place these locks in a separate and distinct class which has never been equalled.

The method of attaching is one of the most evident of the advantages obtained through the form of the Unit There is no mortise made in the door, but a piece is cut out of the edge of the door of the exact size of the lock Lock. There is no mortise made in the door, but a piece is cut out of the edge of the door of the exact size of the lock case. The lock is then slipped into place just as it comes from the box, the adjusting screw is then tightened, bringing the escutcheons in close contact with the sides of the door. The escutcheons are then screwed to the sides of the door

and the job is completed.

#### OAKLAND DESIGN FRONT DOOR SETS



Cast Bronze Per Set. EA7428721/4 -- Dull Brass, Natural Color.

No. SKA742872 1/2 -- Sanded Brass, Oxidized and Relieved ..... 39.34

Lock-No. 2445, 2 % x3 % x 1% in. Case, 3 in. Backset, Cast Bronze Front Beveled 1/8 in. in 2 inches, Cast Bronze Bolts, Not Reversible, Cast Bronze Protected Box Strike and Frame, 1 Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

Operated-Latch Bolt by Knob from Either Side Except when Outside Knob is Set by Stop in Face of Lock, Dead Bolt by Thumb Knob from Inside and Both Dead Bolt and Latch Bolt by Same Key from Outside at all Times.

Knobs—Two, Size 2 ¼ in. Escutcheons—Two, Size 10x3 in.

Note-When ordering, State Hand and Thickness of door, and if Reverse Bevel for doors opening out is wanted. Weight Per Set 6 1/2 Pounds.

One Set in a Box, with Screws. OFFICE DOOR SETS



Cast Bronze

Per Set

No. EA742588-Dull Brass, Natural Color . . . . . . 828 . 67 No. SKA742588-Sanded Brass, Oxidized and Re-

lieved Lock-No. 2467, 2x3 % x1 % in. Case, 3 in. Backset, Cast Bronze Front Beveled 1/2 in. in 2 inches, Cast Bronze Bolt, Not Reversible, Cast Bronze Box Strike and Frame, 1 Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

Operated-By Knob from Either Side, Except when Outside Knob is Set by Knurled Ring on Inside Knob Shank, and by Key from Outside at all Times.

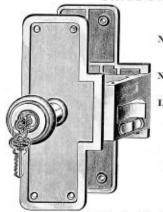
Knobs-Two, Size 2 1/4 in.

Escutcheons-Two, Size 4x5 in.

Note-When ordering, State Hand and Thickness of door, and if Reverse Bevel for doors opening out is wanted. Weight Per Set 5 1/2 Pounds.

One Set in a Box, with Screws.

WOODSTOCK DESIGN FRONT DOOR SETS



Cast Bronze

Per Set No. SKA7838721/2 - Sanded Brass, Oxidized and Relieved . . . . . . . . . . . . \$39 . 35

No. HB783872 1/2 - Statuary Bronze, Light.. 38.80

Lock-No. 2445, 2%x3%x 1 % in. Case, 3 in. Backset, Cast Bronze Front Beveled 1/4 in. in 2 inches, Cast Bronze Bolts, Not Reversible, Cast Bronze Protected Box Strike and Frame, 1 Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

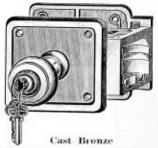
Operated-Latch Bolt by Knob from Either Side, Except when Outside Knob is Set by Stop in Face of Lock, Dead Bolt by Thumb Knob from Inside, and Both Dead Bolt and Latch Bolt by Same Key from Outside at all Times.

Knobs-Two, Size 2 1/4 in. Escutcheons-Two, Size 9x3 in.

Note-When ordering, State Hand and Thickness of door, and if Reverse Bevel for doors opening out is wanted. Weight Per Set 61/4 Pounds.

One Set in a Box, with Screws.

## OFFICE DOOR SETS



Per Set.

No. SKA783564-Sanded Brass, Oxidized and Relieved No. HB783564—Statuary Bronze, Light..... 36.65

Lock—No. 02464, 2 % x3 ¾ x1 % in. Case, 3 in. Backset, Cast Bronze Front Beveled ¼ in. in 2 inches, Cast Bronze Bolts, Not Reversible, Cast Bronze Box Strike and Frame, 1 Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

Operated-By Knob from Either Side, Except when Outside Knob is Set by Stop in Face of Lock, and by Key from Outside at all Times. Auxiliary Latch Automatically Locks Latch Bolt and Stop so they Cannot be Forced Back when the Door is Closed, but Does not Prevent Key or Knobs from Operating Latch Bolt.

Knobs—Two, Size 2 ¼ in. Escutcheons—Two, Size 4 ½ x4 ¼ in.

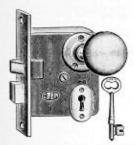
Note-When ordering, State Hand and Thickness of door, and if Reverse Bevel for doors opening out is wanted. Weight Per Set 5 % Pounds.

One Set in a Box, with Screws.

\*Not Carried in Stock, but Shipped Direct from Factory.

## SECTIONAL INSIDE LOCK SETS

#### WITH METAL KNOBS



Wrought Brenze Mountings

Per Set No. EA704144-Dull Brass, Natural Color . . . . . . . . \$2.44

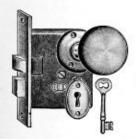
Lock-No. 785, 3 % x3 1/4 in. Japanned Iron Case, 2 1/6 in. Backset, 5 1/2 x 1/8 in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 24 Changes, 1 Nickel Plated Steel Key.

Knobs-Two No. 1420, Size 2 in., & in. Straight Spindle.

Escutcheons—Two No. 2560, Size 1 1/8 x1 1/8 in.

Weight Per Set 2 Pounds.

One Set in a Box, with Screws.



Wrought Bronze Mountings

Per Set No. EA704146-Dull Brass. Natural Color . . . . . . . . . \$2.44

Lock—No. 785, 3 % x3 ¼ in. Japanned Iron Case, 2 % in. Backset, 5 ½ x ⅓ in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 24 Changes, 1 Nickel Plated Steel Key.

Knobs-Two No. 14191/2. Size 21/4 in., is in. Straight Spindle.

Escutcheons-Two No. 2560, Size 1 % x1 % in.

Weight Per Set 2 Pounds.

One Set in a Box, with Screws.

## WITH GLASS KNOB AND CLOSET SPINDLE



Wrought Bronze Mountings

Per Set No. EA055160 - Dull Brass, Natural Color ......\$2.65

No. E055160-Nickel Plated, Polished. 2.80

Lock—No. 785, 3 % x3 ¼ in. Japanned Iron Case, 2 ¾ in. Backset, 5 ½ x ¼ in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 24 Changes, 1 Nickel Plated Steel Key.

Knob-One No. 340 1/2, Pressed Glass, Size 2 1/4 in.

Escutcheon-One No. 2560, Size 1 % x1 % in.

Closet Spindle-One No. 44 1/4. Thumb Piece and Rose, its in. Straight Threaded Spindle.

> Weight Per Set 21/4 Pounds. One Set in a Box, with Screws.

## WITH GLASS KNOBS



Wrought Brenze Mountings Per Set No. EA055038 — Dull Brass, 

Lock—No. 13271, 3 \( \frac{1}{2} \) x3 \( \frac{1}{2} \) in. Japanned Iron Case, 2 \( \frac{1}{2} \) in. Backset, 5 \( \frac{1}{2} \) x \( \frac{1}{2} \) in. Wrought Steel Front. Brass Plated Cast Iron Bolts, Reversible, 1 Tumbler, 12 Changes, 1 Nickel Plated Steel

No. EA055156-Dull Brass, Natural Color........\$3.00

Lock—No. 785, 3 % x3 ¼ in. Japanned Iron Case, 2 ½ in. Backset, 5 ½ x13 in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 24 Changes, 1 Nickel Plated Steel Key.

Knobs—Two No. 340½, Pressed Glass, Size 2¼ in., ¼ in. Straight Threaded Spindle.

Escutcheons-Two No. 2560, Size 1 % x1 % in. Weight Per Set 21/2 Pounds. One Set in a Box, with Screws.



Cast Bronze Mountings

Per Set. No. EA075156-Dull Brass, Natural Color .......\$3.55

Lock—No. 785, 3 % x3 ¼ in. Japanned Iron Case, 2 % in. Backset, 5 ½ x1% in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 24 Changes, 1 Nickel Plated Steel Key.

Knobs-Two No. 240 1/2, Pressed Glass, Size 2 1/4 in., 1/6 in. Straight Threaded Spindle.

Escutcheons-Two No. 2660, Size 1 % x1 1/8 in. Weight Per Set 2 % Pounds. One Set in a Box, with Screws.

## GLASS KNOB BATH ROOM SETS



Only Inside Trim is furnished with Bathroom Lock Sets. Any Knob and Escutcheon may be used for Outside.

Wrought Bronze Mountings

Per Set No. E055436-Nickel Plated. Polished ..., \$3.00

Lock-No. 159, 3 % x3 ¼ in. Japanned Iron Case, 2 % in. Backset, 5 1/2 x 1/8 in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible. Operated-Latch Bolt by Knob from Either Side, Dead Bolt by Thumb Knob from Inside Only.

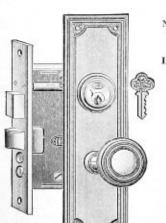
Knob-One No. 340 1/2, Pressed Glass, Size 2 1/4 in., & in. Straight Threaded Spindle.

Thumb Knob-No. 2145, 1 % x1 1/8 in. Plate. Weight Per Set 2 Pounds. One Set in a Box, with Screws.

## VICTOR DESIGN

Wrought Bronze and Wrought Steel

#### CYLINDER FRONT DOOR SETS



Wrought Bronze Per Set

No. KA710842 — Dull Brass, Oxidized and Relieved . . . . . \$12.80

Lock — No. 1343, 5 % x3 % in. Japanned Iron Case, 2 % in. Backset, 7 % x1 % in. Cast Bronze Front. Cast Bronze Bolts Easy Spring Latch Bolt, Reversible, 1 Cast Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

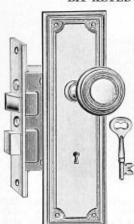
Operated—Latch Bolt by Knob from Either Side, Except when Outside Knob is Set by Stop in Face of Lock, Dead Bolt by Thumb Knob from Inside, Both Dead Bolt and Latch Bolt by Same Key from Outside at All Times.

Knobs-Two No. 71022, Size 21/4 in., 3/4 in. Swivel Spindle.

Escutcheons—Outside No. 71029, Size 10½x3 in.; Inside No. 71031, Size 7¼x2% in.

Weight Per Set 4% Pounds. One Set in a Box, with Screws.

## BIT KEYED FRONT DOOR SETS



Wrought Bronze

Per Set No. KA710822—Dull Brass, Oxidized and Relieved...\$5.80

Lock—No. 1251, 4 % x3 ½ in. Japanned Iron Case, 2 ½ in. Backset, 7x1 in. Wrought Bronze Front, Bronze Bolts, Easy Spring Latch Bolt, Reversible, 2 Tumblers, 48 Changes, 2 Nickel Plated Steel Keys.

Operated — Latch Bolt by Knob from Either Side, Except when Outside Knob is Set by Stop in Face of Lock, Dead Bolt by Key from Inside, Both Dead Bolt and Latch Bolt by Same Key from Outside at All Times.

Knobs—Two No. 71022, Size 2¼ in.,  $\frac{1}{10}$  in. Swivel Spindle. Escutcheons—Outside No. 71029, Size 10½x3 in.; Inside No. 71031, Size 7¼x2¾ in.

#### Wrought Steel

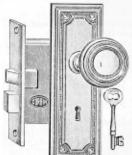
Lock—No. 3251, Plated Wrought Steel Front, Brass Plated Iron Bolts, Otherwise Same as Lock No. 1251 Described Above.

Knobs—Two No. 61022½, Two-Piece, Size 2¼ in., % in. Swivel Spindle.

Escutcheons—Outside No. 61029, Size 10½ x3 in.; Inside No. 61031, Size 7½ x2% in.

> Weight Per Set 3½ Pounds. One Set in a Box, with Screws.

#### INSIDE DOOR SETS



Wrought Bronze

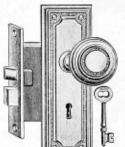
Per Set No. KA710156—Dull Brass, Oxidized and Relieved...\$3.35

Lock—No. 785, 3 % x3 ¼ in. Japanned Iron Case, 2 ½ in. Backset, 5 ½ x ¾ in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 24 Changes, 1 Nickel Plated Steel Key.

Knobs—Two No. 71022, Size 21/4 in., 1/6 in. Straight Spindle.

Escutcheons — Two No. 71031, Size 7 ¼ x2 % in.

Weight Per Set 21/4 Pounds. One Set in a Box, with Screws.



Wrought Steel

Per Dozen Sets No. KA610048½—Dull Brass, Oxidized and Relieved...\$13.90

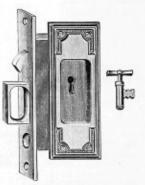
Lock—No. 13271, 3¾x3¼ in. Japanned Iron Case, 2¾ in. Backset, 5¼x% in. Wrought Steel Front, Brass Plated Cast Iron Bolts, Reversible, 1 Tumbler, 12 Changes, 1 Nickel Plated Steel Key.

Knobs—Two No. 61022½, Size 2¼ in., & in. Straight Spindle.

Escutcheons—Two No. 61031, Size 7 ¼ x2 % in.

Weight Per Set 2 Pounds. One Set in a Box, with Screws.

## SLIDING DOOR SETS Wrought Steel



For Single Doors

Per Set No. KA610306—Dull Brass, Oxidized and Relieved. \$3.55

Lock—No. 13092, 5 ¼ x4 in. Japanned Iron Case, 2 ¾ in. Backset, 7 ½ x 15 in. Wrought Steel Front, Cast Bronze Bolt and Pull, 1 Bronze Key.

Escutcheons—Two No. 61034, Size 6 ¼ x2 ¼ in.

Weight Per Set 21/4 Pounds.

#### For Double Doors

Per Set No. KA610308—Dull Brass, Oxidized and Relieved \$5.55

Lock—No. 13100, for Double Doors, Otherwise Same as Lock No. 13092 Described Above.

Escutcheons—Four No. 61034, Size 64x24 in. Weight Per Set 34 Pounds. One Set in a Box, with Screws.



# ELECTRIC PUSH BUTTONS Wrought Bronze

Size 3 1/2 x 1 1/2 in.

Each

Weight Per Box & Pound. Three in a Box, with Screws.

## PORTLAND DESIGN

Wrought Bronze and Wrought Steel

## CYLINDER OFFICE DOOR SETS



Wrought Bronze

No. EA702526 — Dull Brass, Natural Col-

Operated—By Knob from Either Side Except when Outside Knob is Set by Stop in Face of Lock, and by Key from Outside at All Times.

Master Keyed in Sets as Desired with Other Corbin Master Keyed Cylinder Locks.

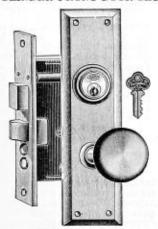
Knobs—Two No. 1419 ½ PW, Size 2 ¼ in., ¾ in. Swivel Spindle.

Escutcheons-Two No. 70230, Size 9x2 1/2 in.

Note—When Ordering, State Hand and Thickness of Door. Weight Per Set 4 % Pounds.

One Set in a Box, with Screws.

#### CYLINDER FRONT DOOR SETS



Wrought Bronze

					Per Se
No.	R702842-	-Antique	Copper.	Polished.	 .\$12.00
	EA702842-				

Lock—No. 1343, 5 % x3 % in. Japanned Iron Case, 2 % in. Backset, 7 % x1 % in., Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Cast Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

Operated—Latch Bolt by Knob from Either Side, Except when Outside Knob is Set by Stop in Face of Lock, Dead Bolt by Thumb Knob from Inside, Both Dead Bolt and Latch Bolt by Same Key from Outside at All Times.

Knobs—Two No. 1419 1/2 PW, Size 2 1/4 in., 3/6 in. Swivel Spindle.

Escutcheons—Outside No. 70229, Size 10x2 % in.; Inside No. 70231, Size 7x2 % in.

Weight Per Set 4 % Pounds. One Set in a Box, with Screws.

## CYLINDER VESTIBULE DOOR SETS



#### Wrought Bronze

Per Set
No. R702742—Antique
Copper, Polished...\$10.90
No. EA702742 — Dull
Brass, Natural Col-

versible, I Cast Bronze
Ball Be a r i n g Cylinder,
Changes Unlimited, 3 Nickel Silver Keys.
Operated—By Knob from
Either Side, Except when
Outside Knob is Set by Stop
in Face of Lock, and by Key

from Outside at All Times.

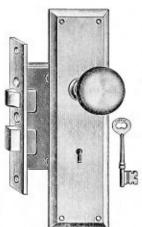
Knobs—Two No. 1419 ½ PW, Size 2 ¼ in., % in. Swivel Spindle.

Escutcheons-Two No. 70230, Size 9x21/2 in.

Weight Per Set 31/4 Pounds.

One Set in a Box, with Screws.

#### BIT KEYED FRONT DOOR SETS



Wrought Bronze

Lock—No. 1251, 45 x 3½ in. Japanned Iron Case, 2½ in. Backset, 7x1 in. Wrought Bronze Front, Bronze Bolts, Easy Spring Latch Bolt, Reversible, 2 Tumblers, 48 Changes, 2 Nickel Plated Steel Keys.

Operated — Latch Bolt by Knob from Either Side, Except when Outside Knob is Set by Stop in Face of Lock, Dead Bolt by Key from Inside, Both Dead Bolt and Latch Bolt, by same Key from Outside, at All Times.

Knobs-Two No. 1419 1/2, Size 2 1/4 in., 1/6 in. Swivel Spindle.

Escutcheons—Outside No. 70229, Size 10x2 % in.; Inside No. 70231, Size 7x2 % in.

#### Wrought Steel

Per Set

No. R602806—Antique Copper, Polished......\$3.10

No. EA602806—Dull Brass, Natural Color........3.10

Lock—No. 3251, Plated Wrought Steel Front, Bronze Plated Iron Bolts, Otherwise Same as Lock No. 1251 Described Above.

Knobs-Two No. 01419 1/2, Size 2 1/4 in., 1/6 in. Swivel Spindle.

Escutcheons—Outside No. 60229, Size 10x2 1/4 in.; Inside No. 60231, Size 7x2 1/4 in.

Weight Per Set 31/2 Pounds.

One Set in a Box, with Screws.

## PORTLAND DESIGN

Wrought Bronze and Wrought Steel

#### INSIDE DOOR SETS



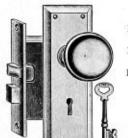
#### Wrought Bronze

Per Set
No. R702156—Antique Copper,
Polished \$3.20
No. EA702156—Dull Brass,
Natural Color 3.20
Lock—No. 785, 354 x 344, in Ja-

Lock—No. 785, 3 % x3 ¼ in. Japanned Iron Case, 2 % in. Backset, 5 ½ x 18 in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 24 Changes, 1 Nickel Plated Steel Key.

Knobs-Two No. 1419 1/2, Size 2 1/4 in., 1/5 in. Straight Spindle.

Escutcheons—Two No. 70231, Size 7x2 4 in. Weight Per Set 24 Pounds. One Set in a Box, with Screws.



#### Wrought Steel

Knobs—Two No. 1523½, Size 2¼ in., ½ in. Straight Spindle.

Escutcheons—Two No. 60231, Size 7x2 1/4 in.
Weight Per Dozen Sets 24 Pounds.
One Set in a Box, with Screws.

## SLIDING DOOR SETS





Weight Per Set 2 % Pounds. For Double Doors Per Set

No. R602308—Antique Copper, Polished \$5.80 No. EA602308—Dull Brass, Natural Color 5.80

Lock—No. 13100, for Double Doors, Otherwise Same as Lock No. 13092 Described Above. Escutcheons—Four No. 60234, Size 7x2¼ in.

Weight Per Set 4½ Pounds. One Set in a Box, with Screws.

## ELECTRIC PUSH BUTTONS



Size 3 ½ x1 ½ in. Each
No. R70261—Antique Copper, Polished.. \$1.65
No. EA70261—Dull Brass, Natural Color. 1.65
Weight Per Box ¾ Pound.

Three in a Box, with Screws.

Wrought Bronze

#### BATH ROOM SETS

Only Inside Trim is furnished with Bath Room Lock Sets. Any Knob and Escutcheon may be used for outside,



Wrought Bronze

Per Set

No. E702436—Nickel Plated,
Polished \$2.70

Lock—No. 159, 4 ½ x 3 ½ in. Ja-

panned Iron Case, 2¾ in. Backset, 6¼x1¼ in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible Dead Bolt Operated by Thumb Knob from Inside Only. Knob—One No. 1419½, Size 2¼

in., fg in. Straight Spindle. Escutcheon—One No. 70231, Size 7x2 4 in., with Thumb Knob.

#### Wrought Steel

Knob—One No. 1523 ½, Size 2 ¼ in.,  $f_6$  in. Straight Spindle. Escutcheon—One No. 60231, Size 7x2 ¼ in., with Thumb Knob. Weight Per Set 2 Pounds.

One Set in a Box, with Screws.

#### ESCUTCHEONS



	Wrought Bronze Size 7x2 1/4 in. Per Dozen
No.	R70231-Antique Copper, Pol-
	ished
No.	EA70231—Dull Brass, Natural Col-
	or 7.20
	A70231—Polished Brass 7.20
No.	E70231-Nickel Plated, Polished 7.92
No.	F70231-Genuine Rustless Iron 5.28
	Wrought Steel
	Size 7x2 1/4 in. Per Dozen
No.	R60231-Antique Copper, Polished . \$3.72
	EA60231-Dull Brass, Natural Col-
	or 3.72 Weight Per Dozen 3 Pounds.
On	e-quarter Dozen in a Box, with Screws.

Weight Per Dozen 5 Pound. Two Dozen in a Box, with Screws.

## Wrought Bronze



Weight Per Dozen & Pound.

#### Cast Bronze

Two Dozen in a Box, with Screws.

## RONDO DESIGN

Wrought Bronze and Wrought Steel

#### CYLINDER FRONT DOOR SETS



Wrought Bronze
Per Set
No. 2A722842—Sanded

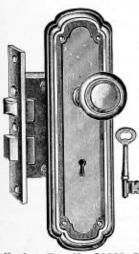
Lock—No. 1343, 5 % x3 % in. Japanned Iron Case, 2 % in. Backset, 7 % x1 ½ in. Cast Bronze Front. Cast Bronze Bolts Easy Spring Latch Bolt, Reversible, 1 Cast Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

Operated—Latch Bolt by Knob from Either Side, Except when Outside Knob is Set by Stop in Face of Lock, Dead Bolt by Thumb Knob from Inside, Both Dead Bolt and Latch Bolt by Same Key from Outside at All Times.

Knobs—Two No. 72222, Size 2¼ in., ¾ in. Swivel Spindle. Escutcheons—Outside No. 72229, Size 11x3 in.; Inside No. 72231, Size 7¾x2½ in.

> Weight Per Set 4 % Pounds. One Set in a Box, with Screws.

#### BIT KEYED FRONT DOOR SETS



Wrought Bronze

Lock—No. 1251, 45% x3 ½ in.
Japanned Iron Case, 2½ in.
Backset, 7x1 in. Wrought
Bronze Front, Bronze Bolts,
Easy Spring Latch Bolt,
Reversible, 2 Tumblers, 48
Changes, 2 Nickel Plated
Steel Keys.

Operated—Latch Bolt by Knob from Either Side, Except when Outside Knob is Set by Stop in Face of Lock, Dead Bolt by Key from Inside, Both Dead Bolt and Latch Bolt by Same Key from Outside at All Times,

Knobs—Two No. 72222, Size 2 ¼ in.,  $\frac{\pi}{16}$  in. Swivel Spindle. Escutcheons—Outside No. 72229, Size 11x3 in.; Inside No. 72231, Size 7 ¾ x2 ½ in.

#### Wrought Steel

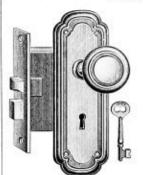
No. 2A622806—Sanded Brass, Oxidized and Relieved, High Lights Polished.......\$3.67

Lock—No. 3251, Plated Wrought Steel Front, Brass Plated Iron Bolts, Otherwise Same as Lock No. 1251 Described Above.

Knobs—Two No. 62222, Size 2¼ in., fo in. Swivel Spindle.
Escutcheons—Outside No. 62229, Size 11x3 in.; Inside No. 62231, Size 7¾x2½ in.

Weight Per Set 3 1/2 Pounds. One Set in a Box, with Screws.

#### INSIDE DOOR SETS



Wrought Bronze

Lock—No. 785, 3 % x3 ¼ in. Japanned Iron Case, 2 % in. B a c k s e t, 5 ½ x1% in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 24 Changes, 1 Nickel Plated Steel Key.

Knobs—Two No. 72222, Size 2 1/4 in., 🖧 in. Straight Spindle.

Escutcheons — Two No. 72231, Size 7%x2½ in.

Weight Per Set 2 1/4 Pounds. One Set in a Box, with Screws.

#### Wrought Steel

Per Dozen Sets No. 2A622048—Sanded Brass, Oxidized and Relieved,

High Lights Polished . . . . \$17.80

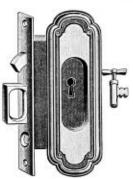
Lock—No. 13271, 3 % x3 % in. Japanned Iron Case, 2 % in. Backset, 5 % x % in. Wrought Steel Front, Brass Plated Cast Iron Bolts, Reversible, 1 Tumbler, 12 Changes, 1 Nickel Plated Steel Key.

Knobs—Two No. 62222, Size 21/4 in., A in. Straight Spindle.

Escutcheons—Two No. 62231, Size 7 % x2 1/2 in.

Weight Per Set 2 Pounds. One Set in a Box, with Screws.

#### SLIDING DOOR SETS Wrought Steel



For Single Doors Per Set

No. 2A622306 — Sanded Brass, Oxidized and Relieved, High Lights Pol-

Escutcheons — Two No. 62234, Size 7 % x2 ½ in. Weight Per Set 2 % Pounds.

For Double Doors Per Set No. 2A622308 — Sanded Brass, Oxidized and Relieved, High Lights Pol-

Escutcheons—Four No. 62234, Size 7¾ x2½ in.
Weight Per Set 4¾ Pounds.
One Set in a Box, with Screws.

#### ELECTRIC PUSH BUTTONS

## Wrought Bronze

Size 4x11/2 in.

Each

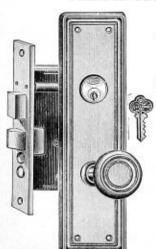
No. 2A72261—Sanded Brass, Oxidized and Relieved, High Lights Polished.....\$1.40 Weight Per Box ¼ Pound.

Three in a Box, with Screws.

## DOVER DESIGN

Wrought Bronze and Wrought Steel

#### CYLINDER FRONT DOOR SETS



Wrought Bronze

Per Set No. 2A725842-Sanded Brass, Oxidized and Relieved, High Lights Polished .....\$13.67

Lock-No. 1343, 5 % x3 % in. Japanned Iron Case, 2% in. Backset, 7%x1½ in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Cast Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys. Operated - Latch Bolt by Knob from Either Side, Except when Outside Knob is Set by Stop in Face of Lock, Dead Bolt by Thumb Knob from Inside, Both Dead Bolt and Latch Bolt by Same Key from Outside at all Times.

Knobs-Two No. 72522, Size 21/4 in., 1/8 in. Swivel Spindle. Escutcheons-Outside No. 72529, Size 11x3 in.; Inside No. 72531, Size 7 % x2 1/2 in.

Weight Per Set 4% Pounds. One Set in a Box, with Screws.

## CYLINDER VESTIBULE DOOR SETS

Wrought Bronze



Per Set 2A725742 - Sanded Brass, Oxidized and Re-lieved, High Lights Pol-Lock-No. Backset, 6 1/4 x 1 1/5 in. Cast Bronze Front, Cast Bronze Easy Spring Latch Bolt, Reversible, 1 Cast Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

Operated—By Knob from Either Side Except when Outside Knob is Set by Stop in Face of Lock, by Key from Outside at all Times.

-Two No. 72522, Size 21/4 in., 1/8 in. Swivel Spindle. Escutcheons-Outside No. 72530, Size 9x2 % in.; Inside No. 72531, Size 7 % x2 % in.

Weight Per Set 31/4 Pounds. One Set in a Box, with Screws.

## ELECTRIC PUSH BUTTONS



Size 4x1 1/2 in.

Each No. 2A72561-Sanded Brass, Oxidized and Relieved, High Lights Polished . . . . . . \$1.46 Weight Per Box 75 Pound. Three in a Box, with Screws.

SLIDING DOOR SETS

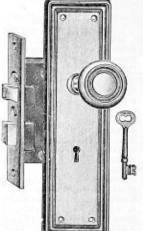
## Wrought Steel

Lock-5 1/4 x4 in. Japanned Iron Case, 2 1/4 in. Backset, 7 1/8 x 1/3 in. Wrought Steel Front, Cast Bronze Bolt and Pull, 1 Bronze Key. For Single Doors For Double Doors

Per Set No. 2A625306-Sanded Brass, Oxidized and Relieved, High Lights Polished ......\$4.13 Escutcheons-Two No. 62534, Size 7 % x2 1/2 in. Weight Per Set 2% Pounds.

One Set in a Box, with Screws.

BIT KEYED FRONT DOOR SETS Wrought Bronze



Per Set

No. 2A725822 — Sanded Brass, Oxidized and Relieved, High Lights Pol-

Lock—No. 1251, 4 % x3 ½ in. Japanned Iron Case, 2 ½ in. Backset, 7x1 in. Wrought Bronze Front, Bronze Bolts, Easy Spring Latch Bolt, Reversible, 2 Tumblers, 48 Changes, 2 Nickel Plated Steel Keys.

Operated - Latch Bolt by Knob from Either Side Ex-cept when Outside Knob is Set by Stop in Face of Lock, Dead Bolt by Key from Inside, Both Dead Bolt and Latch Bolt by Same Key from Outside at all Times.

Knobs—Two No. 72522, Size 234 in. 45 in. Swivel Spindle. Escutcheons—Outside No. 72529, Size 11x3 in.; Inside No. 72531, Size 734x234 in.

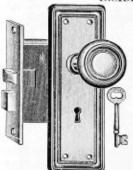
Wrought Steel No. 2A625806-Sanded Brass, Oxidized and Relieved,

Lock-No. 3251, Plated Wrought Steel Front, Brass Plated Iron Bolts, Otherwise Same as Lock No. 1251 Described Above.

Knobs—Two No. 62522, Size 2¼ in., fo in. Swivel Spindle. Escutcheons—Outside No. 62529, Size 11x3 in.; Inside No. 62531, Size 7 % x2 % in.

Weight Per Set 3 1/2 Pounds. One Set in a Box, with Screws.

#### INSIDE DOOR SETS



Wrought Bronze

Per Set No. 2A725156-Sanded Brass, Oxidized and Relieved. High Lights Polished . . \$3.98

Lock—No. 785, 35 x 3 1/4 in. Ja-panned Iron Case, 2 1/6 in. Backset, 5 1/2 x 1/8 in. Cast Backset, 5½x½ in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 24 Changes, 1 Nickel Plated Steel Key.

Knobs-Two No. 72522, Size 21/4 in., is in. Straight Spindle. Escutcheons-Two No. 72531, Size 7 ¾ x2 ½ in. Wrought Steel Per Dozen Sets

No. 2A625048-Sanded Brass, Oxidized and Relieved,

Backset, 5 1/4 x 1/8 in. Wrought Steel Front, Brass Plated Cast Iron Bolts, Reversible, 1 Tumbler, 12 Changes, 1 Nickel Plated Steel Key.

Knobs—Two No. 62522, Size 2¼ in.,  $\frac{\pi}{10}$  in. Straight Spindle. Escutcheons—Two No. 62531, Size  $7\frac{3}{4}$  x2½ in. Weight Per Dozen Sets 27 Pounds.

One Set in a Box, with Screws.

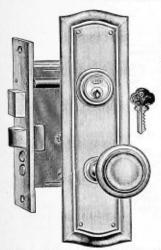
Per Set

No. 2A625308-Sanded Brass, Oxidized and Relieved, High Lights Polished ...... ...\$6.35 Escutcheons-Four No. 62534, Size 7 % x2 1/2 in. Weight Per Set 4% Pounds. One Set in a Box, with Screws.

## WAKEFIELD DESIGN

Wrought Bronze and Wrought Steel

#### CYLINDER FRONT DOOR SETS



Wrought Bronze Per Set

No. KA726842 — Dull Brass, Oxidized and Relieved . . . . . . . . . \$13 . 33

Lock-No. 1343, 5 % x3 % in. Japanned Iron Case, 2 % in. Backset, 7 % x1 % in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Cast Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

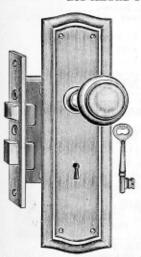
Operated-Latch Bolt by Knob from Either Side, Except when Outside Knob is Set by Stop in Face of Lock, Dead Bolt by Thumb Knob from Inside, Both Dead Bolt and Latch Bolt by Same Key from Outside at All Times.

Knobs-Two No. 72622, Size 21/4 in., 3/8 in. Swivel Spindle.

Escutcheons-Outside No. 72629, Size 11x3 in.; Inside No. 72631, Size 7 % x2 1/2 in.

> Weight Per Set 4 % Pounds. One Set in a Box, with Screws.

#### BIT KEYED FRONT DOOR SETS



Wrought Bronze

Per Set No. KA726822-Dull Brass. Oxidized and Relieved. \$5.80

Lock-No. 1251, 45% x3 1/2 in. Japanned Iron Case, 21/2 in. Backset, 7x1 in. Wrought Bronze Front, Bronze Bolts, Easy Spring Latch Bolt, Reversible, 2 Tumblers, 48 Changes, 2 Nickel Plated Steel Keys.

Operated - Latch Bolt by Knob from Either Side, Ex-cept when Outside Knob is Set by Stop in Face of Lock, Dead Bolt by Key from Inside, Both Dead Bolt and Latch Bolt by Same Key from Outside at All Times.

Knobs—Two No. 72622, Size 2½ in., 5 in. Swivel Spindle.

Escutcheons-Outside No. 72629, Size 11x3 in.; Inside No. 72631, Size 7% x21/2 in.

#### Wrought Steel

Per Set No. KA626806-Dull Brass, Oxidized and Relieved. . \$3.55

Lock-No. 3251, Plated Wrought Steel Front, Brass Plated Cast Iron Bolts, Otherwise Same as Lock No. 1251 Described Above.

Knobs-Two No. 62622, Size 21/4 in., 45 in. Swivel Spindle. Escutcheons-Outside No. 62629, Size 11x3 in.; Inside No. 62631, Size 7 % x2 1/2 in.

> Weight Per Set 3 1/2 Pounds. One Set in a Box, with Screws.

#### INSIDE DOOR SETS



Wrought Bronze Per Set

No. KA726156 - Dull Brass, Oxidized and Relieved .....\$3.78 Lock-No. 785, 3 % x3 ¼ in. Japanned Iron Case,  $2\frac{1}{16}$ Backset  $5\frac{1}{2}x\frac{1}{3}$  in C Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler,

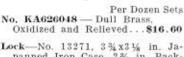
Steel Key. Knobs—Two No. 72622, Size 214 in., is in. Straight Spindle.

24 Changes, 1 Nickel Plated

Escutcheons-Two No. 72631, Size 7 % x2 1/2 in.

Weight Per Set 21/4 Pounds. One Set in a Box, with Screws.

## Wrought Steel



panned Iron Case, 2% in. Back-set, 5% x% in., Wrought Steel Brass Plated Cast Iron Front, Bolts, Reversible, 1 Tumbler, 12 Changes, 1 Nickel Plated Steel Key.

Knobs-Two No. 62622, Size 2 1/4 in., 16 in. Straight Spindle.

Escutcheons-Two No. 62631, Size 7 % x2 1/2 in.

Weight Per Set 2 Pounds. One Set in a Box, with Screws.

#### SLIDING DOOR SETS

Wrought Steel

For Single Doors

Per Set No. KA626306 - Dull Brass, Oxidized and Relieved....\$3.80 Lock-No. 13092, 5 1/4 x4 in., Japanned Iron Case, 2 % in. Backset, 7 % x } in. Wrought Steel Front, Cast Bronze Bolt and Pull, 1

Bronze Key. Escutcheons-Two No. 62634, Size 7 % x2 1/2 in.

Weight Per Set 2 % Pounds.

For Double Doors Per Set No. KA626308 - Dull Brass,

Oxidized and Relieved .... \$5.80 Lock-No. 13100, for Double Doors, Otherwise Same as No. 13092 Described Above.

Escutcheons-Four No. 62634, Size 7 % x2 1/2 in.

Weight Per Set 4 % Pounds. One Set in a Box, with Screws.

#### ELECTRIC PUSH BUTTONS

Wrought Bronze

Size 4x1 1/2 Inches. Each No. KA72661-Dull Brass, Oxidized and

Relieved .....\$1.31 Weight Per Box, 1/4 Pound.

Three in a Box, with Screws.



## FRENCH WINDOW LOCK SETS

#### PORTLAND DESIGN



Flat Front	Lock,	Wrought	Bronze
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	그는 이번 경영 전쟁이 아름다면 하면 하는 사람들이 되었다면 하는 사람들이 하는 사람들이 되었다.
**	Per Set
No.	
No.	EA702112—Dull Brass, Natural Color 5.55
No.	SKA702112—Sanded Brass, Oxidized and Re-
	lieved 5.90
Loc	k—No. 1283, 3 % x2 /k in. Japanned Iron Case, 1 ½ in. Backset, 5 ¼ x % in. Wrought Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 12 Changes, 1 Nickel Plated Steel Key.
Kno	bb and Lever—Knob No. 1421, Size 1¾ in., Lever No. 2124, Size 2 in., ¼ in. Straight Spindle.

#### Flat Front Lock, Wrought Steel

Per Se
No. R602057-Antique Copper Polished \$2.20
No. EA602057—Dull Brass, Natural Color 2.20
No. SKA602057-Sanded Brass, Oxidized and Re-
lieved 2.33
Lock—No. 3283, Wrought Steel Front, Cast Iron Bolts, Otherwise Same as No. 1283 Described Above.
Knob and Lever—Knob No. 01421, Size 1¾ in., Lever No. 3124, Size 2 in., ½ in. Straight Spindle.

Escutcheons—Two No. 60237, Size 4 % x1 ½ in, Weight Per Set 1 ½ Pounds.

Escutcheons-Two No. 70237, Size 4 % x1 1/2 in.

#### Rabbeted Front Lock, Wrought Bronze

Per Set	
No. R702114—Antique Copper, Polished\$6.65	í
No. EA702114—Dull Brass, Natural Color 6.65 No. SKA702114—Sanded Brass, Oxidized and Re-	
lieved	
Lock—No. 2383, 3 % x2 % in. Japanned Iron Case, 1 ½ in. Backset, 5 % x1% in. Wrought Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 12 Changes, 1 Nickel Plated Steel Key.	

Knob and Lever—Knob No. 1421, Size 1 ¾ in.; Lever No. 2124, Size 2 in., <sup>5</sup><sub>10</sub> in. Straight Spindle.

Escutcheons-Two No. 70237, Size 4 % x1 ½ in.

## Rabbeted Front Lock, Wrought Steel

No.	R602059—Antique Copper, Polished\$2.	Set
No.	EA602059—Dull Brass, Natural Color	80
	leved	90
Lock	-No. 3383, Wrought Steel Front, Cast Iron Bol Otherwise Same as No. 2383 Described Above.	ts,

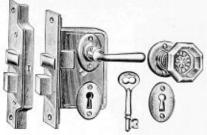
Knob and Lever—Knob No. 01421, Size 1 ¼ in., Lever No. 3124, Size 2 in., ¼ in. Straight Spindle.

Escutcheons-Two No. 60237, Size 4 1/4 x1 1/2 in.

Weight Per Set 1 % Pounds.

One Set in a Box, with Screws.

SECTIONAL, WITH GLASS KNOB



Flat Front Lock, Wrought Bronze

DONOLLO Antique Conner Polished

NO. B	Mail 2 - Antique Copper, Ponshed
No. EA	053112-Dull Brass, Natural Color 4.00
No. SKA	.053112-Sanded Brass, Oxidized and Re-
lieve	ed 4.20
Lock-N	o. 1283, 3 % x2 % in. Japanned Iron Case, 1 1/2 in.
Back	kset, 5 1/4 x 7/8 in. Wrought Bronze Front, Cast
	nze Bolts, Easy Spring Latch Bolts, Reversible, 1
Tun	bler, 12 Changes, 1 Nickel Plated Steel Key.
Knob an	d Lover Knob No. 24074 Octagon Clear Glass

Knob and Lever—Knob No. 340 %, Octagon Clear Glass, Size 1 %, in., 1 %, in. Rose, Lever No. 2124, Size 2 in., 1 % x1 % in. Rose, % in. Straight Spindle.

Escutcheons-Two No. 2560, Size 1 % x1 % in.

#### Rabbeted Front Lock, Wrought Bronze

No.	R053114—Antique	Copper	Polished		85.10
No.					
No.	SKA053114-Sanded	Brass,	Oxidized	and, Re-	
	lieved				5 25

Lock—No. 2383, 3 % x2 % in. Japanned Iron Case, 1 ½ in. Backset, 5 ¾ x ½ in. Wrought Bronze Front, Otherwise Same as No. 1283 Described Above.

Knob, Lever, Rose and Escutcheons—Same as in Set No. 053112.

> Weight Per Set 1% Pounds. One Set in a Box, with Screws.

## THUMB KNOBS



Cast Bronze  $1 \frac{1}{2} \times 1 \frac{1}{8}$  in. Plate,  $\frac{1}{18}$  in. Spindle.

No. EA2149—Dull Brass, Natural Color... \$6.60 No. E2149—Nickel Plated, Polished... 7.20 Weight Per Dozen 1½ Pounds.

One Dozen in a Box, with Screws.

#### Cast Bronze

2 ½ x1 % in. Plate, ½ in. Spindle. Per Dozen No. EA2149 ¼—Dull Brass, Natural

Weight Per Dozen 2½ Pounds. One Dozen in a Box, with Screws.



Cast Bronze  $1 \frac{8}{8} \times 1 \frac{1}{8}$  in. Plate,  $\frac{3}{10}$  in. Spindle.

Pressed Glass, Cast Bronze Base and Rose 1¼ in. Knob, 15 x1½ in. Rose, 15 in. Spindle.

Per Dozen

One Dozen in a Box, with Screws.



Per Set

Dor Sat

Dor Cat

## BUTTON LOCK SETS

# SCHLAGE

This type of lock is assembled in a set at the factory and sold as a comple e unit. It does away with the use of inside keys.. The door is locked from the inside by pressing the button in the knob, and the act of turning the inside knob unlocks the door. Other types may be unlocked from the outside by a key in the knob.

It requires no mortising. To apply simply drill two holes in the door, slip in the lock and tighten two machine screws to clamp the complete set to the door.

Reversible for either right or left hand doors and adjustable for doors from 1% to 1% in, thick,

Furnished with functions for Entrance Doors, Bedroom Doors, Bathroom Doors and ordinary Inside Doors and Closet Latches, with metal, glass or opal glass knobs, in any standard finish.



	EXTERIOR DOOR SETS	
	Pe	r Set
No. AK- 1-With Metal	Knobs	4.00
	Knob Outside and Glass Knob Inside	
No. AK-13-With Metal	Knob Outside and Opal Glass Knob Inside	4.50

Operation-Locked from Inside by Push Button in Knob, Unlocked from Outside by Key in Knob and from Inside by Turning Knob.

#### BEDROOM OR OTHER INTERIOR DOOR SETS

		Per Set
No. AB- 1-With Metal	Knobs	\$3.00
No. AB- 2-With Glass	Knobs	3.50
No. AB-23-With Glass	Knob Outside and Opal Glass Knob Inside	3.75
No. AB- 3-With Opal	Glass Knobs	4.00

Operation-Locked from Inside by Push Button in Knob, Cannot be Unlocked from Outside, Unlocked from Inside by Turning Knob.

#### BATHROOM DOOR SETS

	Per	Set
No. AE- 1-With Metal	Knobs	.00
No. AE- 2-With Glass	Knobs	.50
No. AE-23-With Glass	Knob Outside and Opal Glass Knob Inside	.75

Operation—Locked from Inside by Push Button in Knob, May be Unlocked from Outside by Flat Emergency Key in Knob, Unlocked from Inside by Turning Knob.

#### CLOSET LATCH SETS

## With Knob on Both Sides

No. AL- 1-With M	Metal Knobs S2.50
	lass Knobs
No. AL-33-With Op	pal Glass Knobs

Operated-By Knob from Either Side, Has No Locking Feature.

## With Knob on One Side and Thumb Turn on Other Side

	Per Set
No. AC-1-With Metal	Knob
	Knob
No. AC-3-With Opal	Glass Knobs

Operated-By Knob from One Side and Thumb Turn from the Other Side, Has No Locking Feature.

Note-When ordering be sure to Specify Finish Desired.

## FORGED IRON HARDWARE FOR ENTRANCE DOORS

HANDLES









No.	1	2	50	1	C	L

Per Set ....

12501HT 12501CL 11x2 34 3 1/2 x 2 1/4 3 14 x 2 % 1 14 \$9.00 9.00

No. 12500TP

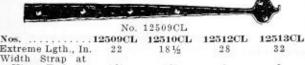
Cylinder, Inches ..... Weight, Lbs. ....

12500TP 12500EN 12x2 % 9 % x2 1/2 3 % x2 % 3 1/2 x 2 1/4 1 14 \$5.00 5.50

Per Set ..... Note-Either Type Grip may be had in any of the Four Designs. One Handle with Cylinder Collar and Stud Head Screws in a Box.

HINGE STRAPS

OFFSET HINGE STRAPS



44 Oct	THE PROPERTY.	1201001	1-01-01	X-0-4
Extreme Lgth., In.	22	181/2	28	32
Width Strap at				
Hinge End, In.	1 %	1 34	3	3
Sq. Stud Scr., In.	%x12	% x12	1 1/4 x 1/4	114x14
Wt. Each, Lbs	1 1/8	1	3	3 1/4
Each	\$2.50	2.25	3.75	4.00



	No.	12509TP		
Nos	12509TP	12510TP	12512TP	12513TP
Extreme Lgth., In	. 23	19 1/2	2834	3 2 34
Width Strap at				
Hinge End, In.	1 %	1 %	3	3
Sq. Stud Ser., In.	56 x 1 2	56 x 1 2	1 1/4 x 1/4	114x14
Wt. Each, Lbs	1 1/8	1	3	3 1/4
Each	\$2.50	2.25	3.75	4.00



	No.	12509HT		
Nos 1		12510HT	12512HT	12513HT
Extreme Lgth., In.	22 1/4	18 %	28 1/4	321/4
Width Strap at			100.000	10,000
Hinge End, In.	1%	1 3/4	3	3
Sq. Stud Scr., In.	% x12	5% x12	1 1/4 x 1/4	1 1/4 x 1/4
Wt. Each, Lbs	1 1/8	1	3	3 1/4
Each	\$2.50	2.25	3.75	4.00



Nes		12512EN 2836	12513EN 32 16
Width Strap at Hinge		-0.72	02 /2
End, Inches		3	3
Square Stud Screw, In	% x12	1 1/4 x 1/4	1 1/4 x 1/4
Weight Each, Lbs	2	3 14	3 1/6
Each		6.75	7.00
One in a Pa	ackage, wit	h Screws.	



Nos. Extreme Length, Inches.		12511HT 22 1/4	12511TP 23
Width Strap at Hinge End, Inches Square Stud Screw, In		1 ¾ % x12	1 % % x12
Weight, Lbs Each	1 %	1 %	1 %
One in a Pa			







No. 12640	No. 12641	No. 12	642
Nos Length, Inches		12641 7 1/6	12642 6 1/6
Width, Inches Weight, Lbs	3 ½	3 1/2	3 1/2
Each	\$5.00	1 % 7.00	6.00
One in a Bo	x, with Square	Stud Screws.	

ELECTRIC PUSH BUTTONS









No. 12508CL No. 12508HT No. 12508TP No. 12508EN Nos. . . . . . 12508CL 12508HT 12508TP 12508EN Length, In. . . 3 ½ 3 ¼ 3 % 2 ¼ 3 14 3 % 2 1/2 Width, In.... 214 2 34 1 14 Weight, Lbs.. 14 Each ...... \$1.50 1.50 Two in a Box, with Square Stud Screws. 2.00

Note-Forged Iron Hardware can be furnished in three different finishes, all rust-proof: DB-Dead Black, K-Relieved or Gray Iron, KR-Rusty Iron (imitation).

In Ordering Give Finish Symbol

## FORGED IRON HARDWARE

FOR INTERIOR DOORS AND WINDOWS



## MORTISE LATCH SETS

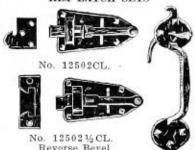
Latch 3¼x3 in., Width ¾ in., Maximum Backset 2½ in. Handle,

	The state of the state of	. It	nches	Per Set
No.	12503CL	8 1/	x2 3%	\$6.00
No.	12503HT	9	x2 %	6.00
No.	12503TP	10	x2 1/2	6.00
No.	12503EN	9	x21/4	6.50

Made for doors 1% to 1% in. thick. Other sizes made to order. One in a Box, with Square Stud Screws.

No. 12503HT.

## RIM LATCH SETS



Reverse Bevel.

		Latch	4	% x2 1/2	in.		Each
No.	12502CL					Wt. 1 Lb	\$5.00
No.	12502 1/2 CI	-Handle	8 1	4 x 2 %	in.,	Rev. Bevel	5.00
No.	12502HT	-Handle	9	x2 %	in.,	Wt. 1 Lb	5.00
No.	12502 1/2 H	Γ—-Handle	9	x2 %	in.,	Rev. Bevel	5.00
No.	12502TP	-Handle	10	x2 1/2	in.,	Wt. 1 Lb	5.00
No.	12502 ½ TI	-Handle	10	x 2 1/2	in.,	Rev. Bevel	5.00
No.	12502EN	-Handle	9	x2 1/4	in.,	Wt. 1 Lb	5.50
No.	12502 1/2 El	N—Handle	9	x2 1/4	in.,	Rev. Bevel	5.50
	One Se	t in a Box.	wit	h Sons	TO S	Stud Screws.	

#### LEVER HANDLES



Each No. 12528EN-Length 3 in., without Spring, Weight Tapped for fig in, threaded spindle, without spindle. One in a Box, with Rosette.



No. 12602.

Without Spindle Each One in a Box, with Rosette.

SURFACE BOLTS



								Eacn
No.	12932—Length	3 1/2	in.,	Weight	Box	1 Lb		\$1.50
No.	12630-Length	4 1/2	in.,	Weight	Box	2 Lb	8	1.50
No.	12631-Length	9	in.,	Weight	Each	114	Lbs	2.50
No.	12631-Length	12	ir.,	Weight	Each	1 1/2	Lbs	3.00
No.	12631-Length	18	in.,	Weight	Each	2	Lbs	3.60
No.	12631-Length	24	in.,	Weight	Each	2 1/2	Lbs.	4.00
N	os. 12932 and 1	2630.	Five	in a B	ox: N	0. 12	2631. 0	)ne
				with S				

#### CASEMENT FASTENERS

Nos. 12900 12901 12902

	Plate 2x1 1/8 in., Levers 3 1/4 in.	Each
No.	12900-Rim, Weight Per Box 1 % Lbs	\$2.00
No.	12901-Mortise, Weight Per Box 1 % Lbs	2.00
No.	12902-Surface, Weight Per Box 1 1/4 Lbs	2.00
	Five in a Box, with Strikes and Screws.	

## SHUTTER HOLDERS

For Brick	Per Pair
No. 1-With Lag Screws	
For Frame	
No. 2-With Lag Screw	1.50

#### SHUTTER HINGE STRAPS

	Extreme Length,	Width at Hinge End,	Square Stud	Weight	
Nos.	In.	In.	Screw	Lbs.	Each
12804CL	14	1 %	34 x 9	5/8	\$1.50
12804HT	14	1 3%	34 x 9	5/8	1.50
12804TP	15	1 3/8	34 x 9	5/8	1.50
12804EN	14 1/2	1 3%	34 x 9	3/4	2.25

One in a Package, with Square Stud Screws.



CHIMNEY IRONS Each 1300-Extreme Length 30 in., Extreme Width 10 1/2 in., One in a Paper.

## FOOT SCRAPERS

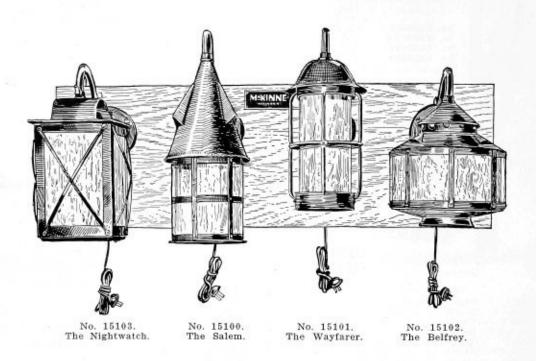


Each No. 13011-Height 6 in., Width 7 1/2 One in Paper, with Lag Screws and Expansion Shields.

Note-Forged Iron Hardware can be furnished in three different finishes, all rust proof.

DB-Dead Black; K-Relieved or Grey Iron; KR-Rusty Iron (Imitation).

## FORGED IRON LANTERNS

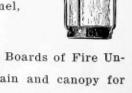


Complete Ready to Install	Complete Ready to Install
No. 15103—The Nightwatch, 11x7 in. \$24.50 No. 15100—The Salem, 14x6 % in. 22.00	No. 15101—The Wayfarer, 11 ½ x 6 ½ in



This is an easy line to handle, inasmuch as each lantern is packed with everything necessary for installation, in a strong carton suitable for reshipment. Carton size is 13x7x15 inches.

These lanterns are forged of Armco Ingot Iron. In addition to this a special rust-proofing treatment is given followed by a final finish of Dupont's Duco over a heavy coat of black enamel, producing a lustre which is lasting and weather proof.



These lanterns meet all the requirements of the various Boards of Fire Underwriters. They are furnished with a bracket or with a chain and canopy for ceiling application. In ordering, state whether chain or wall bracket.

The display board at the top of the page is sold to you completely wired ready to display for the cost of the lanterns alone.

## MORTISE LATCHES



Per Dozen

No. B68¼—Polished Bronze. \$20.00

Description—1¾x1½ in. Japanned

Iron Case, 1½ in. Backset, 2½x½

in. Cast Bronze Front, Cast Bronze

Bolt, Reversible, Cast Bronze

Thumb Knob and Escutcheon,
Operated by Thumb Knob from
One Side Only.

Weight Per Dozen 4 Pounds. One-half Dozen in a Box, with Screws.



Per Dozen No. B68½—Polished Bronze.\$20.55

Description — 2x1½ in. Japanned Iron Case, 1 in. Backset, 3½x5% in. Cast Bronze Front, Cast Bronze Bolt, Reversible, Cast Bronze Thumb Knob and Escutcheon, Operated by Thumb Knob from One Side Only.

Weight Per Dozen 5½ Pounds. One-half Dozen in a Box, with Screws.

## MORTISE KNOB LATCHES



Description—1 ½ x3 ¼ in. Japanned Iron Case, 2 % in. Backset, 2 % x % in. Front, Reversible, Hub for ¼ in. Spindle.

Wrought Steel Front, Cast Iron Bolt

**		42000							P	'eı	r Do	zen
No.	0-	-Lacq	uered			 				6	.84	.00
No.	EA0-	-Dull	Brass,	Natural	Color	 		 			. 4	.80

Wrought Bronze Front, Cast Bronze Bolt

No.	B10-Polish	ed Bronze	501.000		 . 7.35
No.	EA10-Dull	Brass, Natu	ral Cole	or	 . 7.35

Weight Per Dozen 5 Pounds. One Dozen in a Box, with Screws.



Description—1 %x3 ¼ in. Japanned Iron Case, 2 ¾ in. Backset, 3 %x % in. Cast Bronze Front, Cast Bronze Easy Spring Latch Bolt, Reversible, Hub for % in. Spin-

 No.
 B045—Polished Bronze
 \$12.00

 No.
 EA045—Dull Brass, Natural Color
 12.00

Weight Per Dozen 7½ Pounds. One-half Dozen in a Box.



Description—2¼x1% in Japanned Iron Case, 1 in Backset, 3½x¾ in Cast Bronze Front, Cast Bronze Bolt, Reversible, Hub for ½ in Spindle.

Per Dozen
No. B65—Polished Bronze......\$16.00

Weight Per Dozen 5 1/4 Pounds. One Dozen in a Box, with Screws.

## MORTISE KNOB LATCHES



Description—2x2 1/4 in. Japanned Iron Case, 1 1/4 in. Backset, 3 1/2 x1/3 in. Cast Bronze Front, Cast Bronze Bolt, Reversible, Hub for 1/8 in. Spindle.

One-half Dozen in a Box, with Screws.



Description—2½x3½ in. Japanned Iron Case, 2¾ in. Backset, 4½x1¼ in. Cast Bronze Front, Cast Bronze Easy Spring Latch Bolt, Reversible, Hub for ½ in. Spindle.

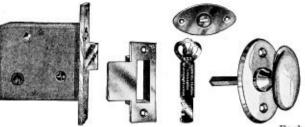
Weight Per Dozen 15½ Pounds. One-quarter Dozen in a Box, with Screws.



Description—2½ x3 % in. Japanned Iron Case, 3 in. Backset, 4½ x1 % in. Cast Bronze Front, Cast Bronze Anti-friction Latch Bolt, Reversible, Hub for % in. Spindle.

One-quarter Dozen in a Box, with Screws.

## MORTISE NIGHT LATCHES

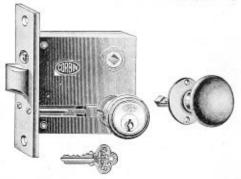


Description—2½x3 in. Cast Bronze Case, 2½ in. Backset, 4½x1 in. Cast Bronze Front, Cast Bronze Bolt and Strike, Bronze Knob and Escutcheon, Lever Tumblers, 1000 Changes, 3 Liberty Silver Keys, Operated by Key from Outside and Thumb Knob Inside.

Note-When Ordering, State if for Right or Left Hand Door.

Weight Each 1½ Pounds. One in a Box, with Screws.

## MORTISE NIGHT LATCHES

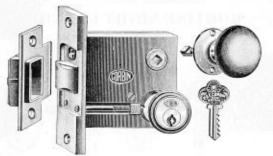


Description—3 ¼ x3 % in. Japanned Iron Case, 2 ¾ in. Backset, 5x1 in. Cast Bronze Front, Cast Bronze Easy Spring Latch Bolt, Reversible, Cast Bronze Knob, Cast Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys, Operated by Key from Outside and Knob from Inside, Bolt may be held back by Stop in Face. Weight Each 2 Pounds.

Weight Each 1% Pounds. One in a Box, with Screws.



Description - 3 1/2 x 3 1/4 in. Japanned Iron Case, 21/2 in. Backset, 4 34 x 3% in. Cast Front, Bronze Cast Bronze Easy Spring Latch Bolt. Revers-Bolt, ible, Cast Bronze Knob, Cast Bronze Ball Bearing Cylinder, Changes Unlimited, 3 Nickel Silver Keys, Operated by Key from Outside and Knob from Inside, Bolt may be held back by Stop in Face.



Description—3 1/4 x3 3/4 in. Japanned Iron Case, 3 in. Backset, 5x1 1/5 in. Cast Bronze Front. Cast Bronze Easy Spring Latch Bolt, Cast Bronze Knob, Cast Bronze Ball Bearing Cylinder. Changes Unlimited, 3 Nickel Silver Keys, Operated by Key from Outside and Knob from Inside, Bolt may be held back by Stop in Face. Note—In Ordering, State if for Right or Left Hand Door.

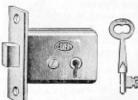
> Weight Each 21/2 Pounds. One in a Box, with Screws.

## MORTISE DEAD LOCKS



Each
No. B99½—Polished Bronze. \$1.45
Description — 1¾x2 in. Japanned
Iron Case, 1½ in. Backset, 2¾x½
in. Cast Bronze Front, Cast Iron
Bolt, Reversible, 1 Nickel Plated
Steel Key.

Weight Per Box, 4 Pounds. Twelve in a Box, with Screws.



No. B116 — Polished Bronze ......\$2.00

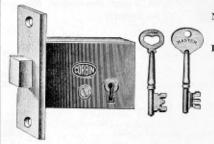
Description—1 % x2 % in. Japanned Iron Case, 1 % in. Backset, 3 ¼ x ½ in. Cast Bronze Front, Cast Bronze Bolt, Reversible, 3 Tumblers, 36 Changes, 1 Nickel Plated Steel Key.

Weight Per Box 3 % Pounds. Six in a Box, with Screws.



No. B132 — Polished Bronze ......\$2.55

Description—2 1/4 x3 3/4 in. Japanned Iron Case, 2 3/4 in. Backset, 4x1 in. Cast Bronze Front, Cast Bronze Bolt, Reversible, 3 Tumblers, 640 Changes, 1 Nickel Plated Steel Key. Weight Box, 5 1/4 Pounds. Six in a Box, with Screws.



No. B144—Pol, ished Bronze

Each

Each

Description — 2 ¼ x 3 ½ in. Japanned Iron Case, 2 ¾ in. Backset, 4 ½ x 1½ in. Cast Bronze Front, Cast Bronze Bolt, Reversible, 4 Tumblers, 6 40 Changes, 1 Nickel Plated Steel Key.

Description—Same as No. B144, but Master Keyed in One Set of 640, all Different, with a Master Key to Pass, or in 16 Sets of 40 Each, the 640 all Different, with Master Keys to Pass Each Set, and Grand Master Key to Pass all. May also be Master Keyed with other Locks having Same Class Master Key.

Weight Per Box 41/2 Pounds. Three in a Box, with Screws.

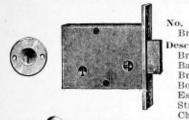


Description—2½x3 in. Japanned Iron Case, 2 in. Backset, 4¾x1½ in. Cast Bronze Front, Cast Bronze Bolt, Reversible, Cast Bronze Escutcheons, 3 Tumblers, 36 Changes, 2 Nickel Plated Flat Steel Keys.

Weight Each 11/12 Pounds. Three in a Box, with Screws,

Each

## MORTISE DEAD LOCKS



No. 13—Polished

Bronze .......\$3.00

Description—2 ¼ x3 in. Cast

Bronze Case, 2¼ in.
Backset, 3¾x% in. Cast
Bronze Front, Cast Bronze
Bolt, Reversible, 2 Bronze
Escutcheons, Bronze
Strike, 4 Tumblers, 1000
Changes, 2 Liberty Silver
Keys.

Weight Each 14 Pounds. One in a Box, with Screws.



No. 7—Polished Bronze. \$3.30

Description — 3 % x2 % in. Japanned Iron Case, 15% in. Backset, 5x1 % in. Cast Bronze Front, Cast Bronze Bolt, Reversible, 2 Bronze Escutcheons, Bronze Strike, 4 Tumblers, 1000 Changes, 2 Liberty Silver Keys.

Weight Each 2 Pounds. One in a Box, with Screws.



No. 4—Polished Bronze ......\$5.00

Description—2 % x3 ½ in.
Cast Bronze Case, 2 ½
in. Backset, 5x1 ½ in.
Cast Bronze Front,
Cast Bronze Bolt, Reversible, 2 Bronze
Escutcheons, Bronze
Strike, 4 Tumblers,
1000 Changes, 2
Liberty Silver Keys.

Weight Each 24 Pounds.

Each

Only.



Weight Each 11/2 Pounds.

Side Only.

One in a Box, with Screws.

## MORTISE DEAD LOCKS



Description—2 % x3 % in. Japanned Iron Case, 2 % in. Backset, 4 % x1 % in. Cast Bronze Front, Cast Bronze Bolt, Reversible, Cast Bronze Cylinder, Changes Unlimited, 3 Nickel Silver Keys, Operated by Key from One Side Only.

Weight Each 1% Pounds.

Thumb Knob, and 1 Cast Bronze Cylinder, Operated by Key from Outside and Thumb Knob from Inside. Weight Each 2 Pounds.

Master Keyed in Sets as Desired with other Corbin Master Keyed Cylinder Locks. One in a Box, with Screws.



Weight Each 2 % Pounds.

Note—The above Locks furnished when so ordered in 1½, 1¾, 2, 2¼, 2½, 3, 3¼, 3½ or 4 in. Backset, the width of the case being 1 in. more than Backset with the exception of the 1½ in. which is ¾ in. more than Backset. Also furnished with rounded front when so ordered.

One in a Box, with Screws.

Each

## MORTISE KNOB LOCKS



Description—3 % x1 % in. Case, 1 in. Backset, 5x % in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 4 Changes, 1 Nickel Plated Steel Key.

Weight Per Box 4 1/8 Pounds.

Six in a Box, with Screws.



Description—3 % x2 % in, Japanned Iron Case, 1 ½ in. Backset, 5 ½ x % in. Wrought Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 12 Changes, 1 Nickel Plated Steel Key.

Weight Per Box 5 Pounds. Six in a Box, with Screws.



Description—3 % x3 1/4 in. Japanned Iron Case, 2 % in. Backset, 5 % x1 1/5 in. Cast Bronze Rabbeted Front, 1/5 in. Rabbet, Cast Bronze Bolts, Easy Spring Latch Bolt, 1 Tumbler, 24 Changes, 1 Nickel Plated Steel Key.

Note — When Ordering, State if for Right or Left Hand Door.

Weight Per Box 9 % Pounds. Six in a Box, with Screws.



No. EA2383 — Dull Brass, Natural Color ......\$2.85

Description—3 % x2 % in. Japanned fron Case, 1 ½ in. Backset, 5 % x ¼ in. Wrought Bronze Rabbeted Front, ½ in. Rabbet, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 12 Changes, 1 Nickel Plated Steel Key.

Each

> Weight Per Box 6 1/2 Pounds. Six in a Box, with Screws.

## MORTISE KNOB LOCKS



Each

Description—3 % x2 14 in. Japanned Iron Case, 1 1/2 in. Backset, 5 1/2 x1/8 in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 24 Changes, 1 Nickel Plated Steel Key.

Note—Furnished with 2 in. Backset when so ordered, width of Case ¾ in. more than Backset.

> Weight Per Box 6 Pounds, Six in a Box, with Screws.



No. EA2787—Dull Brass, Natural Color . . . . . . 5.40 No. SKA2787 — Sanded Brass, Oxidized and Re-

Description—3 % x2 ¼ in. Japanned Iron Case, 1 ½ in. Backset, 5 % x1 ½ in. Cast Bronze Rabbeted Front, ½ in. Rabbet, Cast Bronze Bolts, Easy Spring Latch Bolt, 1 Tumbler, 24 Changes, 1 Nickel Plated Steel Key.

Note-When Ordering, State if for Right or Left Hand Door.

Note—Furnished with 2 in. Backset when so ordered, width of Case % in. more than Backset.

Weight Per Box 8 1/8 Pounds. Six in a Box, with Screws.



No. EA174 — Dull Brass, Natural Color ......\$3.90

Description—4 ¼ x2 in. Japanned fron Case, 1 ¼ in. Backset, 6 ½ x 1 ½ in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, Cast Bronze Thumb Knob, Dead Bolt Operated by Thumb Knob from Inside Only.

Weight Per Box, 7½ Pounds. Six in a Box, with Screws.



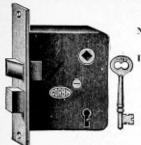
No. EA01365—Dull Brass, Natural Color . . . . . . \$4.45

Description—4 % x2 % in. Japanned Iron Case, 1½ in. Backset, 6 % x1 % in. Cast Bronze Front, Cast Bronze Bolt, Easy Spring Latch Bolt, Reversible, 3 Tumblers, 640 Changes, 1 Nickel Plated Steel Key,

Weight Per Box 9 1/2 Pounds.

Six in a Box, with Screws.

## MORTISE KNOB LOCKS



Description — 3 % x3 % in. Japanned Iron Case, 2 % in. Backset, 5 % x % in. Cast Bronze Front, Cast Bronze Bolts, Reversible, 1 Tumbler, 12 Changes, 1 Nickel Plated Steel Key.

 No.
 R13271—Antique Copper, Polished
 So. 60

 No.
 EA13271—Dull Brass, Natural Color
 60

Description—Wrought Steel Front, Cast Iron Brass Plated Bolts, Otherwise Same as No. 1284.

> Weight Per Box 6 Pounds. Six in a Box, with Screws.



Description—3 % x3 ¼ in. Japanned Iron Case, 2 % in. Back-set, 5 ½ x1% in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 1 Tumbler, 24 Changes, 1 Nickel Plated Steel Key.

Weight Per Box 6 1/2 Pounds. Six in a Box, with Screws.



No. EA1364 — Dull Brass, Natural Color.....\$3.10

Description—3 % x3 % in. Japanned Iron Case, 2 % in. Backset, 5 ½ x1 in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 3 Tumblers, 640 Changes, 1 Nickel Plated Steel Key.

Weight Per Box 8 Pounds. Six in a Box, with Screws.



No. EA795 — Dull Brass, Natural Color.....\$2.65

Description—4 1/4 x 3 1/2 in. Japanned Iron Case, 2 3/4 in. Backset, 6 1/8 x 1 in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolts, Reversible, 1 Tumbler, 12 Changes, 1 Nickel Plated Steel Key.

Weight Per Box 8 Pounds. Six in a Box, with Screws.

## MORTISE KNOB LOCKS



No. EA1365 — Dull Brass, Natural Color . . . . . \$4.45

Description—4 ¼ x 3 ½ in. Japanned Iron Case, 2 ¾ in. Backset, 6 ¼ x 1 ½ in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 3 Tumblers, 640 Changes, 1 Nickel Plated Steel Key.

Weight Per Box 8 % Pounds.

Six in a Box, with Screws.

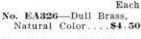


C

No. EA1366 — Dull Brass, Natural Color......85.55

Description—4 ½ x3 ½ in Japanned Iron Case, 2 ¾ in. Backset, 6 % x1 ½ in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 4 Tumblers, 640 Changes, 1 Nickel Plated Steel Key.

Weight Per Box 6 1/4 Pounds. Three in a Box, with Screws.



Description — 4 5% x3 1/4 in. Japanned Iron Case, 2 1/6 in. Backset, 6 1/6 x1 1/8 in. Cast Bronze Front, Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, Cast Bronze Thumb Knob, 1 Tumbler, 24 Changes, 1 Nickel Plated Steel Key, Lower Bolt Operated by Thumb Knob from Inside.

Weight Per Box 4 % Pounds. Three in a Box, with Screws.

## MORTISE COMMUNICATING DOOR LOCKS



No. EA15934—Dull Brass, Natural Color....\$2.75 No. E15934—Nickel

No. E159¼ — Nickel Plated, Polished... 3.00

Description—3 % x3 ¼ in. Japanned Iron Case, 2 % in. Backset, 5 ½ x½ in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 2 Cast Bronze Thumb Knobs, the Split Dead Bolt is Operated from Both Sides by Thumb Knob, Each Locking Against the Opposite Side.

Weight Per Box 6% Pounds. Six in a Box, with Screws. Each

Each

82.25

## MORTISE COMMUNICATING DOOR LOCKS



Description—4½ x3½ in. Japanned Iron Case, 2¾ in. Backset, 6¼ x1½ in. Cast Bronze Front, Cast Bronze Bolts, Reversible, 2 Cast Bronze Thumb Knobs, the Split Dead Bolt is Operated from Both Sides by Thumb Knobs, Each Locking Against the Opposite Side.

Weight Per Box 5 1/4 Pounds. Three in a Box, with Screws.



Description—3 % x3 ¼ in, Japanned Iron Case, 2 % in. Backset, 5 ½ x1½ in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, Cast Bronze Thumb Knob, 1 Nickel Plated Steel Emergency Key, Dead Bolt Operated by Thumb Knob from Inside, but can be Operated from Outside by Emergency Key.

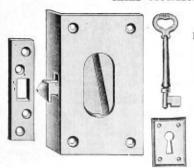
No. E0159—Nickel Plated, Polished.......

Weight Per Box 7 Pounds.

Six in a Box, with Screws,

## SLIDING DOOR LOCKS

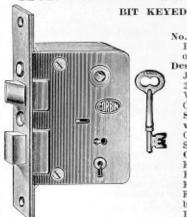
HALF MORTISE



Description — 5x3 in.
Cast Bronze Case,
5x½ in. Cast Bronze
Front, Wrought
Bronze Escutcheon,
Reversible, 1 Nickel
Plated Steel Key.
Operated—By Lift
Lever from Inside
and by Key from
Outside.

> Weight Each 14 Pounds. One in a Box, with Screws.

## MORTISE FRONT DOOR LOCKS



No. EA1251 — Dull Brass, Natural Col-

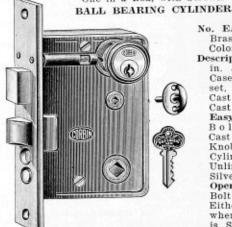
Operated—Latch Bolt by Knob from Either Side, Except when Outside Knob is Set by Stop in Face of Lock, Dead Bolt by Key from Inside and Both Dead Bolt and

Latch Bolt by Same Key from Outside at All Times.

No. EA3251—Dull Brass, Natural Color. . . . . 2.10

Description—Wrought Steel Front, Brass Plated Cast Iron
Bolts, Otherwise Same as No. 1251.

Weight Each 2 Pounds. One in a Box, with Screws.

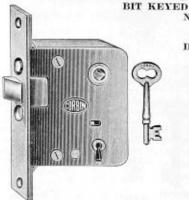


Each
No. EA1343—Dull
Brass, Natural
Color ....\$11.10
Description—5 % x3 %
in. Japanned Iron
Case, 2 % in. Backset, 7 % x1 % in. Backset, 7 % x1 % in. Cast Bronze Front,
Cast Bronze Bolts,
Easy Spring Latch
Bolt, Reversible,
Cast Bronze Thumb
Knob, Cast Bronze
Cylinder, Changes
Unlimited, 3 Nickel
Silver Keys.

Operated — Latch Bolt by Knob from Either Side, Except when Outside Knob is Set by Stop in Face of Lock, Dead

Bolt by Thumb Knob from Inside, and Both Dead Bolt and Latch Bolt by Same Key from Outside at All Times. Weight Each 314 Pounds. One in a Box, with Screws.

## MORTISE VESTIBULE AND OFFICE DOOR LOCKS



No. EA1241 — Dull Brass, Natural

Color ......\$3.00
Description—4½ x3½ in.
Japanned Iron Case,
2½ in. Backset, 6½ x
1 in. Wrought Bronze
Front, Cast Bronze
Easy Spring Latch
Bolt, Reversible, 2
Tumblers, 48
Changes, 2 Nickel
Plated Steel Keys.
Operated — By Knob
From Either Side and

Operated — By Knob From Either Side and by Key from Outside at All Times. Outside Knob is Locked by Stop in Face of Lock.

Weight Each 1% Pounds. One in a Box, with Screws.

## MORTISE VESTIBULE AND OFFICE DOOR LOCKS

BALL BEARING CYLINDER



No. EA1323 - Dull Brass, Natural Col-

Description-4 % x3 % in. Japanned Iron Case, 2 % in. Backset, 6 % x Front, Cast Bronze
Front, Cast Bronze
Easy Spring Latch
Bolt, Reversible, Cast Bronze Cylinder, Changes Unlimited, 3 Nickel Silver Keys. Operated - By Knob from Either Side, and

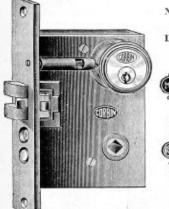
by Key from Outside at All Times.

Outside

0

Knob is Locked by Stop in Face of Lock. Weight Each 21/2 Pounds. One in a Box, with Screws.

## MORTISE OFFICE DOOR LOCKS BALL BEARING CYLINDER



No. EA567-Dull Brass, Natural Color ... \$11.50

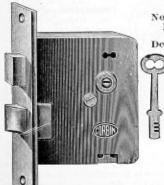
Description—5 % x4 in. Japanned Iron Case, 3 in. Backset, 712x11/4 in. Cast

Bronze Front, Cast Bronze Anti-friction Latch Bolt, Cast Bronze Cylinder, Changes Unlimited, 3 Nickel Silver Keys and 1 Nickel Silver Master Key. Operated-By Knob from Either Side. and by Key from Outside at All Times. Outside Knob is Locked by Stop in Face.

Master Keyed in Sets as Desired with Other Corbin Master Keyed Cylinder Locks.

Note-When Ordering, State if for Right or Left Hand Door Weight Each 31/4 Pounds. One in a Box, with Screws.

## MORTISE STORE DOOR LOCKS BIT KEYED



Each No. EA0186 1/2 - Dull Brass. Natural Color......\$5.10

Description—4½x3¾ in. Ja-panned Iron Case, 2¾ in. Backset, 6 1/2 x1 in. Cast Bronze Front, Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible, 4 Tumblers, 36 Changes, 2 Nickel Plated Steel Keys. Operated - Latch Bolt

by Thumb Piece from Either Side, Dead Bolt by Key from Either Side.

Each No. EA03861/2—Dull Brass, Natural Color.......\$3.70
Description—Cast Iron Front, Otherwise Same as No. Weight Each 21/2 Pounds. 018616. One in a Box, with Screws.

MORTISE STORE DOOR LOCKS BALL BEARING CYLINDER



Each No. EA0288 - Dull Brass, Natural Color . . . . . . . . \$11 - 10

Description - 5x3 % in. Japanned Iron Case, 2% in Backset, 7%x 15 in. Cast Bronze Front, Cast Bronze Bolts, Anti-friction Latch Bolt, Revers-ible, 2 Cast Bronze Cylinders, Changes Unlimited, 3 Nickel Silver Keys.

Operated-Latch Bolt by Thumb Piece from Either Side, Dead Bolt by Key from Either Side.

Weight Each 3 % Lbz.

One in a Box, with Screws.



No. EA1347 1/2 - Dull Brass, Natural Color .... \$11.10

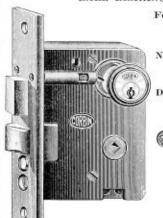
Description 5 1/4 x 3 3/4 in. Japanned Iron Case, in. Backset, 2 34 7 % x1 1/4 in. Cast Bronze Front, Cast Bronze Bolts, Antifriction Latch Bolt, Reversible, Cast Bronze Thumb Cast Knob, Cast Bronze Cylinder, Changes Unlimited, 3 Nickel

Silver Keys.

Operated -Bolt by Thumb Piece from Either Side Except when Outside Thumb Piece is Set by

Bolt by Thumb Knob from Inside and Both Dead Bolt and Latch Bolt by Same Key from Outside at All Times. Weight Each 3 % Pounds.

One in a Box, with Screws. MORTISE FRONT DOOR LOCKS BALL BEARING CYLINDER



For Door Handle Outside and Knob and Escutcheon Inside

Stop in Face of Lock, Dead

Each No. EA134914 - Dull Brass, Natural Color .....\$11.10

Description—5 ¼ x3 % in. Japanned Iron Case, 2 % in. Backset, 7 % x1 ¼ in. Cast Bronze Front, Cast

Bolts, Easy Bronze Spring Latch Bolt, Reversible, Cast Bronze Thumb Knob. Cast Bronze Cylinder, Changes Unlimited, 3 Nickel Silver Keys.

Operated-Latch Bolt by Thumb Piece from Outside, Except when Set by Stop in Face, by Knob from Inside, Dead Bolt by Thumb Knob from Inside, Both Dead Bolt and Latch Bolt by Same Key from Outside. Weight Each 31/2 Pounds.

One in a Box, with Screws.

Each

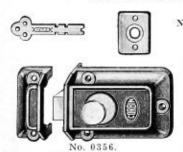
## RIM NIGHT LATCHES

CORBIN TUBULAR



No. 353-2x3 in. Japanned Iron Case, 21/8 Backset, Bronze in. Plated Cast Iron Bolt, Reversible, Bronze Plated Turn Knob, Wrought Bronze Escutcheon, 33 Changes, 2 Nickel Plated Steel Keys, 2 Strikes, 1 Reverse Bevel Doors Opening Out, Operated by Key from Outside and Thumb Knob Inside, Bolt May

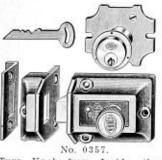
Weight Each | Pound.
One in a Box, with Screws.



Each No. 0356 - 2 1/2 x3 1/2 in. Japanned Iron Case, 2 1/8 in, Backset, Bronze Plated Cast Iron Bolt, Reversible, Bronze Plated Turn Knob, Wrought Bronze Escutcheon, 6 Changes, 2 Nickel Plated Steel Keys, Operated by Key Outside from and Turn Knob Inside, a Turn of the Knob Deadlocks Against the

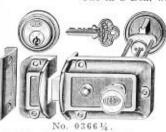
Weight Each 15 Pound. One in a Box, with Screws.

#### CORBIN CYLINDER



Each No. 0357-2 1/4 x 2 7/8 in. Japanned Iron Case, 1% in. Backset, Bronze Plated Cast Iron Bolt, Reversible, Bronze Plated Turn Knob, Wrought Bronze Tubular Pin Tumbler Cylinder, 1500 Changes, 2 Nickel Plated Steel Keys, 2 Strikes, 1 Reverse Bevel for Doors Opening Out, Operated by Key from Outside and

Weight Each 1 % Pounds. One in a Box, with Screws.



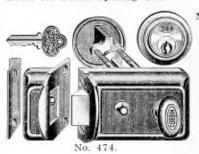
Each No. 036614-21/8 x3 in. Japanned Iron Case, in. Backset, Cast Bronze Bolt, Reversible, Wrought Bronze Turn Knob, Cast Bronze Cylinder, Unlimited, Changes 3 Nickel Silver Keys. 2 Strikes, 1 Reverse Bevel for Doors Opening Out, Oper-

One in a Box, with Screws,

## RIM NIGHT LATCHES

CORBIN CYLINDER

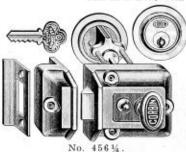
Operated by Key from Outside and Turn Knob Inside, the Stop Inside Deadlocks Against the Key or Holds the Bolt Retracted. Packed with Two Strikes, One Reverse Bevel for Doors Opening Out.



No. R474-2 1/2 x3 1/8 in. Antique Copper Finished Iron 2 % Case, in. Backset, Cast Bronze Bolt, Reversible, Wrought Turn Bronze Knob, Cast Bronze Cylinder, Changes Unlimited, Three Nickel Silver Keys, for Doors % to 2 ½ in. Thick ......\$3.80

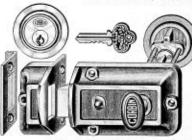
The screws in the case and strike are all concealed, and inaccessible when door is closed.

Weight Each 1% Pounds. One in a Box, with Screws.



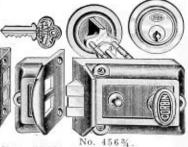
No. 456 14 -- 2 1/2 x 2 7/8 in. Japanned Iron Case, 1 % in. Backset, Cast Bronze Bolt, Reversible, Wrought Bronze Turn Knob, Cast Bronze Cylinder, Cast Changes Unlimited, 3 Nickel Silver Keys, for Doors % to 2 1/2 in. Thick .... \$2.55

Weight Each 17g Pounds. One in a Box, with Screws.



Each No. 356-2 1/4 x 3 % in. Japanned Iron Case, 2 % in. Cast Backset, Bronze Bolt, Reversible, Wrought Bronze Turn Knob, Cast Bronze Cylinder, Changes Unlimited, 3 Nickel Silver Keys, for Doors % to 2 1/2 in. Thick . . . \$2.55

Weight Each 1% Pounds. One in a Box, with Screws.



Description—2½ x3 % in. Iron Case, 2% in. Backset, Cast Bronze Bolt, Reversible, Wrought Bronze Turn Knob, Cast Bronze Cylinder, Changes Unlimited, 3 Nickel Silver Keys, for Doors % to 2½ in. Thick.

Each

No. 456%—Japanned \$4.65

No. R456%—Antique Copper 5.00

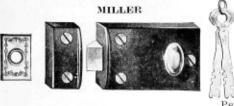
The trip in center of latch bolt is held retracted by contact with strike and secures the latch bolt from being

forced back from the outside.

Weight Each 1 % Pounds.

One in a Box, with Screws.

## RIM NIGHT LATCHES

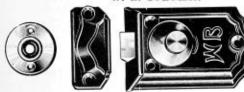


Per Dozen

No. 64-2x3 in. Japanned Iron Case, 215 in. Selvedge, Brass Plated fron Bolt, Reversible, Bronze Turn Knob and Key Plate, 2 Nickel Plated Flat Steel Keys, Operated by Key from Outside and Turn Knob Inside, Bolt May be Held Back by Extra Turn of Knob, for Doors % to 1% in. Thick, 3 Reverse Strikes Packed with Each Dozen......\$9.00

Weight Per Dozen 914 Pounds. One in a Box, With Screws.

#### W. B. TUBULAR



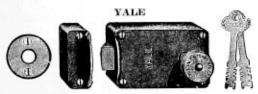
Each

No. 157-2 % x3 % in. Japanned Iron Case, 2 1/2 in. Backset, Malleable Iron Bolt, Reversible, Bronze Escutcheon, Nickel Plated Turn Knob, 2 Flat Steel Keys, Operated by Key from Outside and Turn Knob Inside, Bolt May be Held Back by an Extra Turn of the Knob, for Doors 11/4 to 1 % in. Thick......\$13.50

The mechanism of this lock allows the bolt to be reversed without opening the lock.

Weight Per Dozen 131/2 Pounds. One in a Box, with Screws.

## RIM SPRINGLATCHES



No. 26-2x3 1/4 in. Japanned Iron Case, 2 1/2 in. Backset, Brass Plated Iron Bolt, Reversible, Brass Plated Turn Knob and Key Plate, Warded, 12 Changes, 2 Nickel Plated Flat Steel Keys, Operated by Key from Outside and Turn Knob Inside, 

One in a Box, with Screws.

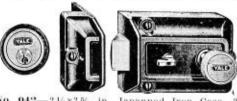


No. 36-24x34 in. Japanned Iron Case, 2 in. Backset, Brass Plated Iron Bolt, Reversible, Brass Plated Turn Knob and Stop, Bronze Cylinder, 4 Pin Tumblers, 1500 Changes, 3 Nickel Bronze Keys, Operated by Key from Outside and Turn 

## RIM DEADLATCHES

YALE MANUAL TYPE

Bolt may be Held Back by Hold Back Lever and also Deadlocked against End Pressure by Key or Knob when Deadlocked Bolt has an additional Throw of 1/8 in.



No. 042-21/2 x3 % in. Japanned Iron Case, 2 % Backset, Brass Bolt, Reversible, Brass Turn Knob, Bronze Cylinder, 5 Pin Tumblers, Changes Unlimited, 3 Nickel Bronze Keys, Operated by Key from Outside and Turn Knob Inside, for Doors % to 2 1/2 in. Thick . . . 

One in a Box, with Screws.

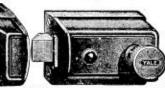




No. 42-2 % x3 1/2 in. Dull Brass Finished Iron Case, 2 % in. Backset, Brass Bolt, Reversible, Brass Turn Knob, Bronze Cylinder, 5 Pin Tumblers, Changes Unlimited, 3 Nickel Bronze Keys, Operated by Key from Outside and Turn Knob Inside, 

Weight Each 11/2 Pounds. One in a Box, with Screws. YALE AUTOMATIC TYPE





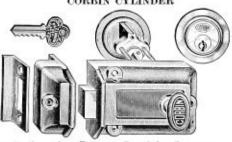


No. 44-Automatic, 2 % x3 1/2 in. Dull Brass Finished Iron Case, 2 % in. Backset, Brass Bolt, Reversible, Brass Turn Knob, Bronze Cylinder, 5 Pin Tumblers, Changes Unlimited, 3 Nickel Bronze Keys, Operated by Key from Outside and Turn Knob Inside, Bolt May be Held Back by Stop. .. \$4.50

is closed it is automatically thrown forward an additional % in. into a deadlocked position.

Weight Each 1% Pounds. One in a Box, with Screws.

## RIM DEAD LOCKS CORBIN CYLINDER



Two Strikes, One Reverse Bevel for Doors Opening Out. Operated by Key from Outside and Turn Knob Inside.

No. 360-21/2x3% in. Japanned Iron Case, 2% in. Weight Each 1% Pounds.

One in a Box, with Screws.

Each

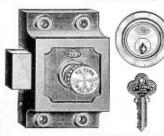
## RIM DEAD LOCKS

CORBIN CYLINDER



Each
No. 1434—4x2½ in. Japanned Iron Case, 1½
in. Backset, Cast
Bronze Bolt, Reversible, Cast Bronze Turn
Knob, Cast Bronze
Cylinder, Changes Unlimited, 3 Nickel Silver
Keys, Operated by Key
from Outside and Turn
Knob Inside.....\$5.35

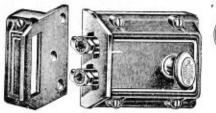
Weight Each  $2 \, \gamma_{\rm ff}$  Pounds. Each



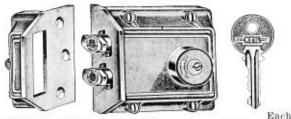
Weight Each 21 Pounds. One in a Box, with Screws.

## KEIL CYLINDER

The Locking Bolts shoot out in a perpendicular position and revolve at right angles, locking the projection on the bolts firmly into the strike. The hardened steel insets inside the bronze bolts cannot be sawed through and give additional security.

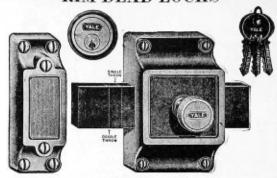


Weight Each 3 % Pounds. One in a Box, with Screws.

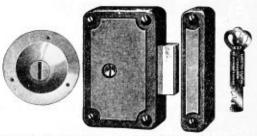


Weight Each 31/3 Pounds. One in a Box, with Screws

## RIM DEAD LOCKS



> Weight Each 4 1/8 Pounds. One in a Box, with Screws.



No. 7½—4¼ x2½ in. Japanned Iron Case, 1½ in. Backset, Bronze Bolt, Reversible, Bronze Escutcheon, 4 Brass Tumblers, 200 Changes, 3 Liberty Silver Keys, Operated by Key from Either Side...\$5.00 Weight Each 2 Pounds.

One in a Box, with Screws.



No. 13½—2¼x3 in. Japanned Iron Case, 2¼ in. Backset, Brass Bolt, Reversible, Brass Escutcheons, 3 Brass Tumblers, 100 Changes, 2 Liberty Silver Keys, Operated by Key from Either Side. \$2.25 Weight Each 1 Pound.

One in a Box, with Screws.



No. 701—2 ½ x2 ¾ in. Japanned Iron Case, Iron Bolt,
12 Changes, 1 Tinned Malleable Iron Key. ....\$3.80

Weight Per Dozen 9 Pounds.

One Dozen in a Box.

## RIM KNOB LOCKS



## Horizontal, with Stop

Weight Per Dozen 23 Pounds.

One-half Dozen in a Box.



## Horizontal, with Stop

No. 5003—3½x5 in. Japanned Iron Case, Brass Plated Iron Bolts, Reversible, 12 Changes, 1 Brass Key........\$10.00 Weight Per Dozen 23 Pounds.

One-half Dozen in a Box.



## Horizontal, with Slide Bolt

No. 561—4x6 in. Japanned Iron Case, Iron Bolts, Reversible, 12 Changes, 1 Tinned Malleable Iron

Weight Per Dozen 26 Pounds. One-quarter Dozen in a Box.



#### Horizontal, Folding Key

Weight Per Dozen 36 Pounds. One-quarter Dozen in a Box.



### Horizontal, with Stop

Weight Per Dozen 15½ Pounds. One-half Dozen in a Box.



#### Upright, with Slide Bolt

No. 251—4 ¼ x3 ½ in. Japanned Iron Case, Iron Bolts, Reversible, 12 Changes, 1 Tinned Malleable Iron Key............\$5.80 Weight Per Dozen 16 Pounds. One-half Dozen in a Box.

## RIM KNOB LOCKS



Horizontal, with Stop

Weight Per Dozen 16 Pounds. One-half Dozen in a Box.

## RIM KNOB LOCK SETS





With Stop

No. 506x106—Jet Knobs, Japanned Mountings....\$13.50 Lock—No. 506, 3½x5 in. Japanned Iron Case, Iron Bolts, Reversible, 12 Changes, 1 Nickel Plated Steel Key.

Weight Per Dozen Sets 34 Pounds.

One Set in a Box.



Per Dozen Sets

ck—No. 040, 3 ½ x4 ¼ in. Japanned Iron Case, Iron Reversible, 6 Changes, 1 Dipped Iron Key.

Weight Per Dozen Sets 26 Pounds. One Set in a Box.

## RIM KNOB LATCHES



> Weight Per Dozen 13 Pounds. One-half Dozen in a Box.

## LEVER HANDLES



Cast Bronze

	2 % in. Lever, 2 % x1 % in. Plate, 5 in. Spindle.
No.	
	Weight Each ¼ Pound.



4 in. Lever, 5 in. Spindle.

No.	210B —Polished Bronze	-
	210DB-Dull Brass, Natural Color 2.00	
	Weight Each Ta Pound.	
	Six in a Box.	



& in. Spindle.

No	204R-	-Polished	Reonze

Length Lever, Inches 3	4
Weight Each, Lbs fig	16
Each \$1.80	2.00
No. 204DB-Dull Brass, Natural Color	
Length Lever, Inches 3	4
Each \$1.80	2.00



Six in a Box.

Cut Glass, Cast Brass Mountings Length 444 in., & in. Spindle.

No.	202B —Polished Bronze	7.
	202DB—Dull Brass, Natural Color 6.00	
	Weight Each & Pounds.	

Six in a Box.

## AUXILIARY SPRINGS

FOR LEVER HANDLES

Wrought Steel, Bronze Plated

						Each
No.	0221/2-	-For	Th.	in.	Spindles	.\$1.20
No.	0231/2-	-For	3%	in.	Spindles	. 1.20

These springs are applied to the wood under rose to hold lever handle in horizontal position. Used under roses 1% indiameter and over.

Open Stock.

## ROSES



## WITH AUXILIARY SPRING

Cast Brass

Size 2 1/4 x 1 1/8 in.

No.	251B -Polis	hed B	ronze	. \$0.80
No.	251DB—Dull	Brass,	Natural Colo	r80
	Weight	Each	a Pound.	

No. 251.

# Twelve in a Box. WITHOUT SPRING

Cast Brass Size 2 ½ x1 % in.

No. 261B —Polished Bronze.......80.40 No. 261DB—Dull Brass, Natural Color. .40

Size 1 % x1 in.

## FLUSH CUP HANDLES



Cast Bronze

1% in. Diameter, % in. Spindle.

Each
No. EA02972 — Dull Brass,
Natural Color.....\$2.00

Weight Each ¼ Pound.

No. 2972.

## Wrought Bronze

	3 in. Diameter, $\hat{\pi}$ in. Spindle.	ach
No.	EA2972—Dull Brass, Natural Color	20,000
	Weight Each 1/2 Pound.	
	Two in a Box, with Screws.	

## Cast Iron



Plate 4x3 ½ in., Diameter Cup 2 % in., % in. Spindle. Each No. J1973 ½—Japanned......\$1.85 Weight Each ¾ Pound.

## Cast Bronze

#### Cast Iron

#### Cast Bronze

Plate 7x3 in., Diameter Cup 25% in., 50 in. Spindle.

Per Dozen Pairs

## DOOR KNOBS

#### JET

## Japanned Iron Mountings



Per Dozen Pairs No. 106-Rim, 2 1/4 in. Knob, 7/6 in. Straight Spindle, Cast Iron Rose No. 107-Mortise, 2 1/4 in. Knob, A in. Straight Spindle, Cast Iron

Weight Per Dozen Pairs 10 Pounds. One-half Dozen Pairs in a Box.

#### PORCELAIN

#### Japanned Iron Mountings



Per Dozen Pairs No. 110-Rim, 21/4 in. Knob, 76 in. Straight Spindle, Cast Iron Rose and Shank......\$3.00

No. 111—Mortise, 2 1/4 in. Knob, A in. Straight Spindle, Cast Iron Rose and Shank...... 3.00

Weight Per Dozen Pairs 10 Pounds. One-half Dozen Pairs in a Box.

#### MINERAL

#### Japanned Iron Mountings



Per Dozen Pairs No. 100-Rim, 214 in. Knob, 4s in. Straight Spindle, Cast Iron Rose 

Weight Per Dozen Pairs 10 Pounds. One-half Dozen Pairs in a Box.

#### STEEL

## Japanned



Per Dozen Pairs No. J1523 1/2 -- 2 1/4 in. Knob. 1/6 in. Spindle, 2 in. Wrought Steel Rose ......\$3.35 Weight Per Dozen Pairs 7 Pounds.

One-half Dozen Pairs in a Box.

#### MORTISE

#### Wrought Steel



24 in Knob, & in Spindle, 2 in. Wrought Steel Rose.

Per Dozen Pairs No. B1523 1/2 -- Bronze Plated . . . \$6.00 No. EA1523 1/2 - Dull Brass, Natural Color ..... 6.00

Weight Per Dozen Pairs 7 Pounds. One-half Dozen Pairs in a Box.

## Wrought Steel



134 in. Knob, de in. Spindle, 158 in. Wrought Steel Rose. Per Dozen Pairs

No. EA01421-Dull Brass, Natural 

### Wrought Bronze

1¾ in. Knob, ¼ in. Spindle, 1¾ in. Wrought Bronze Rose. Per Dozen Pairs No. EA1421-Dull Brass, Natural Color.....\$15.60 Weight Per Dozen Pairs 7 Pounds.

No. 01421, One-half Dozen Pairs; No. 1421, One-sixth Dozen Pairs in a Box.

## DOOR KNOBS

#### MORTISE



No.

Wrought Bronze 214 in. Knob, fc in. Spindle, without Rose.

No. B141932 -- Polished Bronze. \$10.80 No. R1419 1/2 -- Antique Copper, 10.80 No. SKA14191/2-Sanded Brass, Oxidized and Re-No. F1419 12 —Genuine Rustless Iron.....

Weight Per Dozen Pairs 9 4 Pounds. One-sixth Dozen Pairs in a Box, with Screws.

Cast Bronze 2 1/4 in. Knob, & in. Spindle, without

Per Dozen Pairs No. B15191/2 -- Polished Bronze . . . 842.60 No. R15191/2 -- Antique Copper, | Polished | 42.60 | No. EA151934 — Dull Brass, Natural Color | 42.60 ... 42.60 No. No. SKA15191/2 -- Sanded Brass, Oxidized and Re-(ab ad No. E1519½—Nickel Plated, Polished. 41.40 One-sixth Dozen Pairs in a Box, with Screws.



No.

ressed Glass, Cast Bronze Mountings  $2\frac{1}{4}$  in. Knob,  $\frac{5}{16}$  in. Spindle, 2 in. Cast Bronze Rose.

No. B240 1/2 -- Polished Bronze . . . \$2.20 No. EA2401/2 - Dull Brass, Natural Color ... . . . . . . . . . . . . . . . . 2,20 No. E2401/2-Nickel Plated, Polished..... 2.35 1% in. Knob, % in. Spindle, 1% in. Cast Bronze Rose. B240 78 — Polished Bronze . . . . . . . . . . . . 2 . 20 No. EA240 % - Dull Brass, Natural Color..... 2.20 E240%—Nickel Plated, Polished...... 2.35 Weight Per Dozen Pairs 15 1/2 Pounds.

Pressed Glass, Wrought Bronze Mountings 21/4 in. Knob, & in. Spindle, 2 in. Wrought Bronze Rose. Per Pair No. B340½—Polished Bronze ... \$1.90 No. EA3401/2 - Dull Brass, Natural Color..... 1.90 No. E3401/2 -Nickel Plated, Polished . . . . . . . . 2 . 00

Weight Per Dozen Pairs 15 Pounds. One Pair in a Box, with Screws. Pressed Opal Glass, Cast Bronze

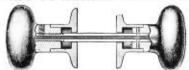


Mountings 214 in. Knob, & in. Spindle, 2 in. Cast Bronze Rose.

 
 No.
 B249—Polished Bronze
 \$2.90

 No.
 EA249—Dull Brass, Natural Color
 2.90
 .... 3.00 E249-Nickel Plated, Polished . . . . . Weight Per Dozen Pairs 171/2 Pounds. One Pair in a Box, with Screws.

#### PW AND PY METHODS OF MOUNTING



PW and PY Knobs use the same spindle. The PW shank is used on wrought knobs and the PY on cast knobs. The outer knob is fastened to the spindle by a pin which is covered by the thimble on the rose. The inner end of the spindle and the shank of the inner knob are threaded, and the knob is screwed down to make a close working contact. It is held in place by a cone point set screw, which enters a groove in the spindle.

## KNOB SPINDLES

-	 The second second second	THE RESERVE AND ADDRESS OF THE PARTY OF THE
COORE		666

Wrought Steel
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Per Dozen

No. 36-5 in., for Standard Shank Knobs, Weight Per Dozen 1% Lbs..... No. 37-% in., for Standard Shank Knobs, Weight Per Dozen 2 1/4 Lbs...... 2.40



#### Wrought Steel

Per Dozen

No. 3612-6 in., Swivel for Standard Shank Knobs, No. 371/2-% in., Swivel for Standard Shank Knobs, Weight Per Dozen 2 Lbs..... 4.00



#### Wrought Steel

Per Dozen

No. 37 34 - 16x 36 in. Centers, Swivel for Standard Shank Knobs, Weight Per Dozen 1 1/2 Lbs. . . . . \$4.80



#### Wrought Steel

Per Dozen

No. 056-4 in., for Glass Knobs, Weight Per Dozen



## Wrought Steel

Per Dozen

No. 056 1/2 - 1/3 in., for Glass Knob on One End and Standard Shank Knob on Other, Weight Per Dozen 1 1/8 Lbs......\$1.60



#### Wrought Steel

Per Dozen

No. 0381/2-is in., Swivel for Glass Knob on One End and Standard Shank Knob on Other, Weight Per 



#### Wrought Steel

Per Dozen

No. 56-5 in., for PY Screwless Knobs, Weight Per 



#### Wrought Steel

Per Dozen

No. 036 34 -A in., Swivel for PY Screwless Knobs, Weight Per Dozen 1 ½ Lbs.

No. 0036 ¾ — fo in., Swivel for PY Screwless Knobs,

Threaded Both Ends, Weight Per Dozen 11/2 

## KNOB SPINDLES



#### Wrought Steel

Per Dozen

No. 037 34 - fax 38 in. Centers, Swivel for PY Screw-. . . . . \$4 . 80 less Knobs, Weight Per Dozen 1 % Lbs. . No. 0037 34 - Ax 3/8 in. Centers, Swivel for PY Screwless Knobs, Threaded Both Ends, Weight Per

Dozen 1 % Lbs..... 5.35



#### Wrought Steel

Per Dozen

No. 038-fax % in. Centers, Swivel for Glass or PY Knob on One End and Standard Shank Knob on Other, Weight Per Dozen 1 1/2 Lbs......\$4.80



#### Wrought Steel

Per Dozen

No. 45-5 in., Split Spindle for Standard Shank Knob, Used with Locks Operated by Knob from One Side Only, Weight Per Dozen 18 Lb......\$4.00



## Wrought Steel

Per Dozen

No. 451/2-fc in., Split Spindle for Glass or PY Knob, Used with Locks Operated by Knob from One Side Only, Weight Per Dozen 15 Lb. ..........\$4.00

## CLOSET KNOB SPINDLES



Wrought Steel

in., Safety Closet Spindle, for Standard Shank Knob. Per Dozen

No. EA44—Dull Brass, Natural Color. . . . ....\$4.00 Weight Per Dozen 214 Pounds.



Wrought Steel

in., Safety Closet Spindle for Glass or PY Knob.

Per Dozen No. EA4414 -- Dull Brass, Natural Color . . . . . ....\$4.00 Weight Per Dozen 2 % Pounds.

## KNOB WASHERS



				WE	rought Steel Per Pound
No.	18-	-For	10	in.	Spindle
No.	19-	-For	3/8	in.	Spindle 1.10
					ound in a Box

## KNOB SCREWS

Per Gross No. 16-% in. x No. 9, Blued Iron, for Standard Shank Knobs, Weight Gross 7 Lb. 80.65 No. 17-5% in. x No. 9, Polished Bronze, for 



No. 14-Steel, Bronze Plated, for PY Screw-Weight Per Gross T Pound. One Gross in a Box.

## LOCK SPRINGS

No. 3-Flat Steel

Width, Inches..... Per Pound ..... \$1.00





No. 12-Brass Extension Spring . . \$1.00 Three Dozen in a Box.

## THUMB KNOB CYLINDERS





Wrought Steel, Bronze Plated

For Thumb Knobs with fe in. Spindle. Each No. 1253 -For Use in No. 253 Cylinder.....\$0.55 

These cylinders are inserted in lock case in place of cylinder where it is desired to have lock operated by thumb knob in place of key. Open Stock.

## LOCK CYLINDERS BALL BEARING PIN TUMBLER





Cylinder.

Interior View of Rim Cast Bronze Cylinder.

2.55

No. 251 -Polished, for Rim Locks and Latches . . . \$1.85 No. 251 1/2 - Polished, for Master Keyed Rim Locks and Latches ...... 2.65

## For Mortise Locks and Latches No. B253-Polished Bronze

Length, Inches		134		1 34	2
Each	\$2.55	2.55	2.55	2.55	2.55

## No. R253-Antique Copper, Polished

Length, Inches	1	1 34	1 1/2	1 34	2
Each	\$2.55	2.55	2.55	2.55	2.55

No. EA253-Dull Brass, Natural Color 1 36 1 14 1 34 Length, Inches. . . . 1 2.55 2.55

# Each .....

No.	F253-Gent	nne ran	stress ir	on	
Length, Inches.	\$2.55	1 ¼ 2.55 Stock.	2.55	$\frac{134}{2.55}$	$\frac{2}{2.55}$

## LOCK CYLINDERS

BALL BEARING, PIN TUMBLER, FOR MASTER KEYED MORTISE LOCKS AND LATCHES



Cast Bronze

No	DOE 9	16	Polished	Dogwood

Length,	Inches	1	1 34	1 36	1 34	2
Each		\$3.35	3.35	3.35	3.35	3.35

## No. R253 1/2 -- Antique Copper, Polished

Length, Incl	nes 1	1 34	1 36	1 34	2
Each	\$3.35	3.35	8.35	3.35	3.35

## No. EA2531/2 - Dull Brass, Natural Color

Length, Inches	1	134	1 36	1 34	2
Each	\$3.35	3.35	3.35	3.35	3.35

### No. F2531/2-Genuine Rustless Iron

	Inches			1 1/2		2 35
Each	******			0.00	0.00	9.90
		Open	Stock.			

## CYLINDER SCREWS

## entremental uniterior and a community of the community of

No. RS-Connecting Screws for Rim Cylinder Locks and Latches, for Any Thickness Door . . . . . . . . . . \$7.35

#### emmma ....

Per 100

No. MS-Cylinder Set Screws, for Mortise Lock Cylinders ......\$10.00

Note-In Ordering, State Backset of Lock.

## ELECTRIC DOOR OPENERS

Each

Each



No. 25006 - 2x3 14x1 in. Japanned Iron Case, Brass Latch and Cap, Length of Mouth 1 1/4 in., for Right or Left Hand 

Weight Each 11/4 Pounds. One in a Box, with Screws.

No. 25005-2x2 % x1 in. Japanned Iron Case, 3 %x 11/4 in. Bronze Front, Bronze Latch, Length of Mouth 11/4 in., for Right or Left Hand Doors .... \$4.75

Weight Each 11/2 Pounds.

One in a Box, with Screws.



## LOCK STRIKES



#### Wrought Bronze

3 % x % in., Lip to Center 1 in., for No. 785

Per Dozen

0

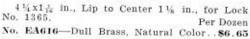
No. EA614—Dull Brass, Natural Color . . . \$3.35 Open Stock.

#### Wrought Steel

3 1/4 x 7/8 in., Lip to Center 1 to 13271.

3 % X % in., Lip to Center 1 in., for Lock No. 13271.	
No. Y609—Amber Bronzed	
Open Stock.	0





4 % x1 in., Lip to Center 1 1/2 in., for Lock No. 0186 1/2.

No. EA618—Dull Brass, Natural Color. . 7.35

## Wrought Steel

4 % x1 in., Lip to Center 1 1/2 in., for Lock No. 0386 1/2. Per Dozen No. EA617—Dull Brass, Natural Color . . . \$2.65 Open Stock.

#### Wrought Bronze

4 1/2 x1 1/2 in., Lip to Center 1 1/4 in., for Lock No. 1343.

Per Dozen No. EA638-Dull Brass, Natural

5½x1½ in., Lip to Center 1½ in., for Locks Nos. 13471/2 and 0288.

No. EA624-Dull Brass, Natural Color ..... 13.35 Open Stock.





#### Cast Iron

For Rim Locks, Latches and Night Latches, Per Dozen No. 411-Japanned, for 3 1/2 in. Locks.....80.75 No. 606—Japanned, for 4 in. Locks.... Open Stock.

## KEY HOLE GUARDS



Per Dozen Travelers Companion-Length 3 in. Over All, White 

To block keyhole insert guard, give key a quarter turn to the right and remove the key. Owing to the pin tumbler mechanism the guard can only be removed with the key.

One Dozen in a Box.

## KEY DUPLICATING MACHINES



#### Automatic

9x6 in. x 5½ in. High, Mounted on a Handsomely Finished Hardwood Cabinet 13½x12½ x 4½ in. High, Containing Two Drawers for Locksmith's Repair Tools and Assorted Blanks. May be Operated by Either Hand or Belt Power.

No. 9101-Assortment Consists of One Key Bitting Machine with File Cutter, One Oak Cabinet and One Gross Assorted Pin Tumbler Blanks....845.00

Important-Keys irregular in form as Yale, Eagle and Lockwood, cannot be held firmly in the vise without blocking. Small wires of different sizes are packed in the Cabinet with the key assortment for this purpose. A wire of the correct size placed in the groove of the blank will make the surface even so that the vise will hold it firmly. This is only necessary with the blank which is to be cut. Some small keys require blocking from the back in order to bring them high enough to cut without cutting into the vise. Small flat wires will be found in the cabinet for this purpose.

Clamp key blank to be bitted in vise (A). Place key vise into bearing (C), sliding caps over vise shaft and clamping so that shaft moves freely without play.

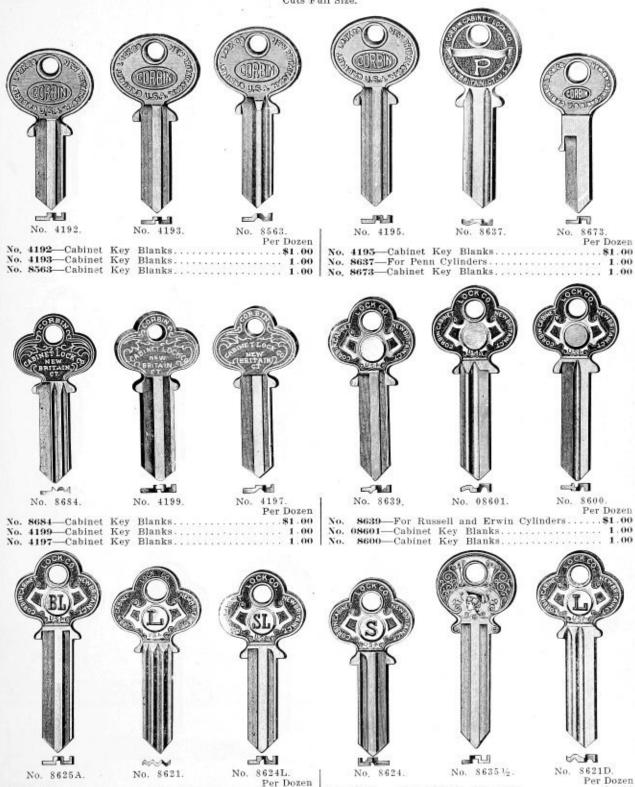
To Operate place left hand on vise (B), in which pattern key is clamped, and with the right hand revolve cutter. While cutter is revolving move vise fixture back and forth slowly from left to right, at the same time bearing down toward gauge D. Continue this movement until cuts in the pattern key are duplicated in the blank and the file revolves without cutting. After removing key from vise remove the slight burrs which has been thrown up so that key will slide easily into the lock.

## KEY ASSORTMENTS



No. 108-Consists of 1 Gross Assorted Till, Trunk, Padlock, and Door Keys and Blanks, in a 15x 

Cuts Full Size.



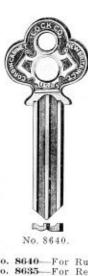
No. 8624L-For Sargent Cylinders........... 1.00 No. 8621D -For Lockwood Cylinders............ 1.00

No. 8621 —For Lockwood Cylinders...... 1.00

No. 8624 -For Sargent Cylinders......\$1.00

No. 8635 1/2 - For Reading Cylinders . . . . . . . . . . . . 1.00

Cuts Full Size.













120									Pe	r	Dozen
No.	8640-For	Russell	and	Erwin	Cyli	nde:	rs.				81.00
No.	8635-For	Reading	Cy	linders.							1.00
No.	4196Cab	inet Key	Bla	nks							1.00

0.22000					Per Dozen
No.	8618-	-Cabinet	Key	Blanks	\$1.00
No.	8632	-Cabinet	Key	Blanks	1.00
No.	8613-	-Cabinet	Key	Blanks	1.00













No. 17.

No.	4196A	-Cabi	net E	Cey	Blanks		 		Ç		. 8	1	00
No.	41974	-Cabi	net F	Cey	Blanks		 					1	.00
No.	10	-For	Yale	Cy	linders.	111	 5.5	 				1	.00

No.	X210—For	Ignition and Transmission	Per Dozen Locks81.00
No.	B-For	Yale Cylinders	1 00
	A 101	Yale Cylinders	

No. 8.













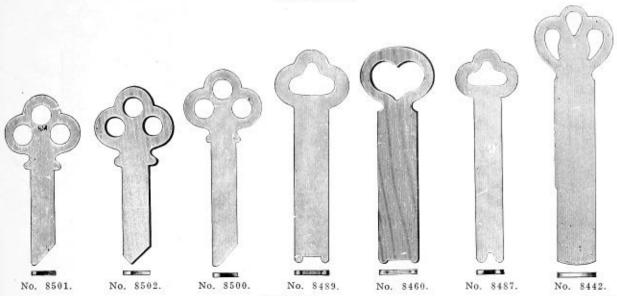
		77 1	0.11.1	Per Dozen
o.	14-For	Yale	Cylinders	80 . 80
0.	16-For	Yale	Cylinders	
0.	6—For	Yale	Cylinders	

No. 16.

No. 115—For Yale Padlocks ..... No. 68—For Yale Padlocks No. 1—For Yale Cylinders

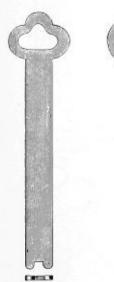
No. 1. Per Dozen .80 .50

Cuts Full Size,



					Per Dozen
No.	8501-Bright	Steel	Door	Key	Blanks\$0.50
No.	8502-Bright	Steel	Door	Key	Blanks
No.	8500-Bright	Steel	Door	Key	Blanks

									1	Pe	г	Dozen
No.	8489-	-Bright	Steel	Door	Key	Blanks		٠	,			\$0.50
No.	8460-	-Bright	Steel	Door	Key	Blanks						.50
No.	8487-	-Bright	Steel	Door	Key	Blanks						.50
No.	8442-	-Bright	Steel	Door	Key	Blanks						.50













No. 8486.

No. 8476.

No. 8484.

No. 8451.

 No.
 8451—Bright Steel Door Key Blanks
 \$0.50

 No.
 8416—Bright Steel Door Key Blanks
 .50

 No.
 8434—Bright Steel Door Key Blanks
 .50

No. 8434.

Per Dozen

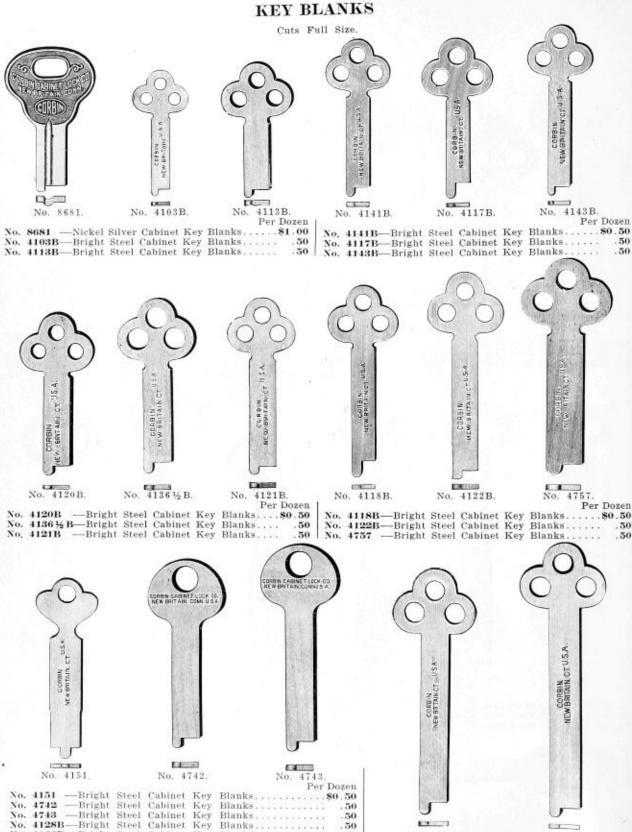
							rei	Dozen
No.	8486-	-Bright	Steel	Door	Key	Blanks,		.\$0.50
No.	8476-	-Bright	Steel	Door	Key	Blanks		50
No.	8484-	-Bright	Steel	Door	Key	Blanks		50
							45	



AND DESCRIPTION OF THE PARTY OF		
	-	7/
No. 8413.		

(	- tu	775

No. 8413.	No. 8419.
Per Dozen	Per Dozen
No. 8413-Bright Steel Door Key Blanks\$0.50	No. 8419—Bright Steel Door Key Blanks\$0.50



.50

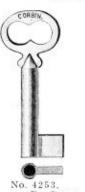
No. 4128B.

No. 4133B.

No. 4133B-Bright Steel Cabinet Key Blanks.....

# KEYS AND KEY BLANKS Cuts Full Size.











				Per	Dozen
No.	4506-Malleable Iron	Cabinet	Key	Blanks	80.60
No.	4251-Wrought Steel	Cabinet	Key	Blanks	. 60
No.	4253—Wrought Steel	Cabinet	Key	Blanks	. 60

No. 4251.

 No. 4601K—Malleable Iron Cabinet Keys
 Per Dozen

 No. 4603 —Malleable Iron Cabinet Keys
 60

 No. 4000 —Polished Bronze Cabinet Key Blanks
 1.50



No. 4506.









Per Dozen
\$0 . 60
ks 60
ks 60
)

No. 4693K—Malleable Iron Cabinet Keys......\$0.60 No. 4001 —Polished Bronze Cabinet Key Blanks...1.50





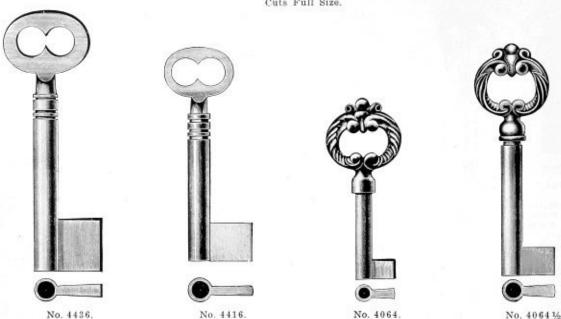






	410.	1200.	210, 12	W. 4.	*10.
				Per	Dozen
No.	4255 -	-Wrought Ste	el Cabinet Key		
No.	4204-	-Wrought Ste	el Cabinet Key	Blanks	1.00
No.	4491-	-Malleable Ir	on Cabinet Key	Blanks	. 80

Cuts Full Size.



Per Dozen No. 4436—Malleable Iron Cabinet Key Blanks.....80.80 No. 4416—Malleable Iron Cabinet Key Blanks......80

Per Dozen No. 4064 -Polished Bronze Cabinet Key Blanks. . \$1.50 No. 406412-Polished Bronze Cabinet Key Blanks. . 1.50



No. 4002. Per Dozen No. 4002—Polished Bronze Cabinet Key Blanks....\$1.50 | No. 4003—Polished Bronze Cabinet Key Blanks....\$1.50



Per Dozen

# TRUNK KEYS AND BLANKS

Cuts Full Size.



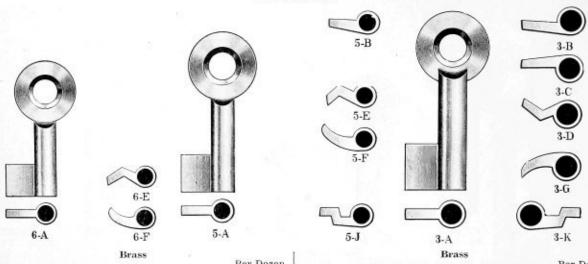
	No. 5110—Malleable Iron Trunk Key Blanks         Per Dozen           No. 5114—Wrought Steel Trunk Key Blanks         1.00           No. 5101—Wrought Steel Trunk Key Blanks         1.00
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No. 5453-Bright Steel Padlock Key Blanks..... . . 50 No. 5566A-Wrought Steel Padlock Key Blanks... 1.00

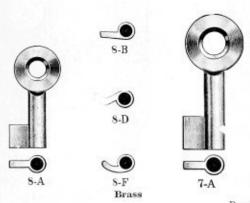
No. 8683-Nickel Silver Padlock Key Blanks ..... 1.00

Cuts Full Size.

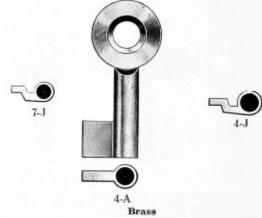


												ozen
No.	6A-Large	Barrel,	for	1 %	and	2	in.	Pad	Hoc	ks.	. \$1	.00
No.	6E-Large	Barrel,	for	1 34	and	2	in.	Pad	lloc	ks.	. 1	.00
No.	6F-Large	Barrel,	for	1 %	and	2	in.	Pad	lloc	ks.	. 1	.00
No.	5A-Small	Barrel,	for	214	in. P	ac	lloc	ks			. 1	.00
No.	5B-Small	Barrel.	for	214	in. F	ac	floc	ks.			, 1	.00
No.	5E-Small	Barrel,	for	214	in. F	ac	lloc	ks.			. 1	.00
No.	5F-Small	Barrel,	for	214	in. F	ac	lloc	ks.	0.00	11.5	. 1	.00

				Bras	88	
						Per Dozen
No.	5J -Small	Barrel,	for	2 14	in.	Padlocks\$1.00
No.	3A-Small	Barrel,	for	2 1/2	in.	Padlocks 1.50
No.	3B-Small	Barrel,	for	2 1/2	in.	Padlocks 1.50
No.	3C-Small	Barrel.	for	2 14	in.	Padlocks 1 . 50
No.	3D-Small	Barrel.	fer	2 1/4	in.	Padlocks 1.50
						Padlocks 1.50
No.	3K-Small	Barrel,	for	2 1/2	in.	Padlocks 1.50



											3	P	ei	· I	lo.	zen
No.	SA-For	1 1/2	in.	Padlocks.	0				 					. 8	1	.00
No.	SB-For	1 1/2	in.	Padlocks.		 ,		ļ.		 					1	.00
No.	SD-For	1 1/2	in.	Padlocks.		4									1	.00
No.	8F-For	1 1/2	in.	Padlocks.											1	.00

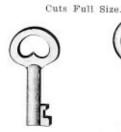


-		-			Per Dozen
- 1	No.	7A—Small	Barrel.	for 13	and 2 in. Padlocks \$1.00
- 1	No.	7J -Small	Barrel.	for 13	and 2 in. Padlocks 1.00
	No.	4A—Large	Barrel,	for 2 %	in. Padlocks 1 . 50
1	No.	4J —Large	Barrel,	for 2 14	in. Padlocks 1 . 50

# SUIT CASE KEYS









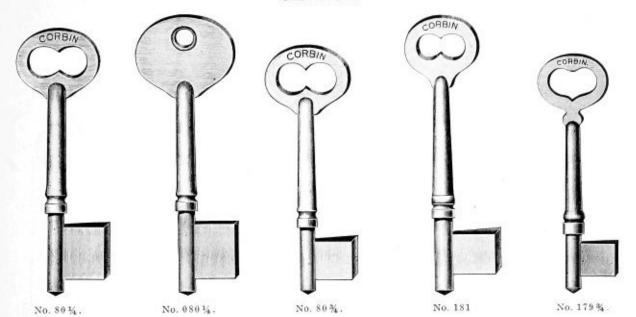




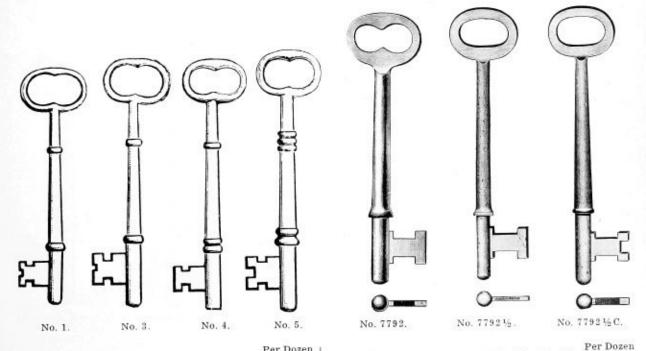
Per Assortment

# KEYS AND KEY BLANKS

Cuts Full Size.



No. 80 34 — Nickel Plated Steel Door Key Blanks. \$2.70 No. 080 34 — Nickel Plated Steel Master Key Blanks. 3.60 No. 80 34 — Nickel Plated Steel Door Key Blanks. 1.20



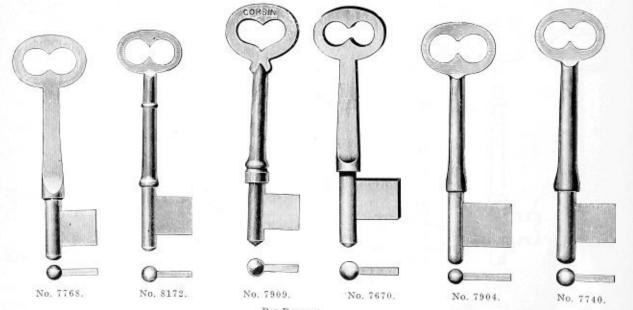
											1	26	r	Dozen
No.	1-Iron	Keys	for	Rim	Locks.									\$0.50
No.	3-Iron	Keys	for	Rim	Locks.			. ,						50
No.	4-Iron	Keys	for	Rim	Locks.		*							. 50
No.	5-Iron	Keys	for	Rim	Locks.									.50

No. 7792 — Nickel Plated Malleable Key Blanks \$0.50 No. 7792½ — Nickel Plated Malleable Key Blanks \$0.50 No. 7792½ C—Nickel Plated Malleable Key Blanks ... .50

Cuts Full Size.



				Per De	ozen					
No.	7700A-Nickel	Plated	Malleable	Iron	.50	No.	7631-Nickel	Plated	Malleable	Iron
No.	7790 —Nickel	Plated	Malleable	Iron	.50	No.	7906-Nickel	Plated	Malleable	Iron
No.	7791 -Nickel	Plated	Malleable	Iron	.50	No.	7762-Nickel	Plated	Malleable	Iron



					Per Do	zen
No.	7768-Nickel	Plated	Malleable	Iron	80	.50
	8172—Nickel					.50
No.	7909—Nickel	Plated	Malleable	Iron		.50

 No. 7670—Nickel Plated Malleable Iron
 Per Dozen

 No. 7904—Nickel Plated Malleable Iron
 \$0.50

 No. 7740—Nickel Plated Malleable Iron
 .50

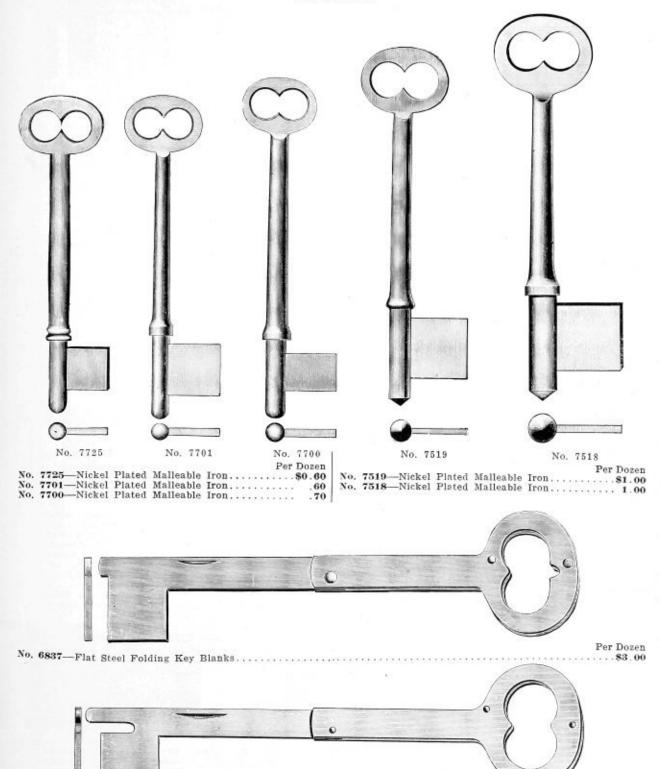
 .50
 .50

.....\$0.50

Per Dozen

# KEY BLANKS

Cuts Full Size.



No. 6830-Flat Steel Folding Key Blanks.....

# CHEST LOCKS

Cuts Half Size



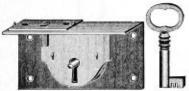
Per Dozen

No. 2-%x1½ in., Steel, Single Link, Back Spring, ¾ in. from Selvedge to Key Pin, 1 Malleable Iron Bow Key. \$2.40 Weight Per Dozen ½ Pound.

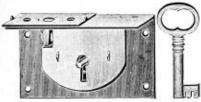
No. 4—1x2 in., Steel, Single Link, Back Spring, ½ in. from Selvedge to Key Pin, 1 Malleable Iron Bow Key. 2:65 Weight Per Dozen ¾ Pound. One Dozen in a Box.



Per Dozen



Per Dozen



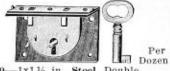
Per Dozen

No. 11—2x3 ½ in. Steel, Single Link, Back Spring, ¾ in. from Selvedge to Key Pin, 1 Ward, 1 Malleable Iron Bow Key . . . . . . . . . . . . 5.00 Weight Per Dozen 2 ¾ Pounds.

No. 10, One Dozen; No. 11, One-half Dozen in a Box.

# CHEST LOCKS

Cuts Half Size,



No. 30—1x1½ in., Steel, Double Link, Back Spring, ½ in. from Selvedge to Key Pin, 1 Malleable Iron Bow Key. \$6.75 No. 030—Brass, Otherwise Same

Link, Back Spring, % in. from Selvedge to Key Pin, 1 Ward, 1 Malleable Iron Bow Key . . . . . 6.50 No. 032—Brass, Otherwise Same

No. 36—1 ¾ x3 in., Steel, Double Link, Back Spring, 1 in. from Selvedge to Key Pin, 1 Ward, 6 Changes, 1 Malleable Iron Bow Key..... 8.20 Weight Per Dozen 2 ½ Pounds. One Dozen in a Box.



No. 100—1 14 x 1 1/2 in., Steel, Double Round Link, 34 in. from Selvedge to Key Pin, Solid Box, Screwed, 2 Se-

cure Levers, 12 Changes, 1 Steel Bow Key......\$10.50 b. 0100 — Brass, Otherwise

Solid Box, Screwed, 2 Secure Levers, 12 Changes, 1 Steel Bow Key...... 11.20



Per Dozen

No. 80—1 % x2 ½ in., Steel,
Self-Locking Double Link,
% in. from Selvedge to
Key Pin, Solid Box,
Screwed, Brass Escutcheon, 4 Hook Tumblers,
Secret Wards, 12 Changes,
1 Double Bitted Key....\$16.50

Weight Per Dozen 2 % Pounds.

One Dozen in a Box.

# CHEST LOCKS

Cuts Half Size.

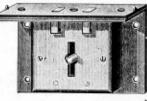


No. 104—1% x2½ in., Steel,
Double Round Link, 1 in.
from Selvedge to Key Pin,
Solid Box, Screwed, 2 Secure Levers, 12 Changes,
1 Steel Bow Key......\$12.25

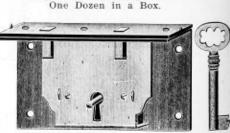
No. 0104 — Brass, Otherwise Same as No. 104...... 14.15 Weight Per Dozen 2 Pounds.

No. 106—2x3 in., Steel, Double Round Link, 1% in. from Selvedge to Key Pin, Solid Box, Screwed, 2 Secure Levers, 12 Changes, 1 Steel Bow Key

No. 109—2 ¼ x3 ½ in., Steel, Double Round Link, 1¼ in. from Selvedge to Key Pin, Solid Box, Screwed, 2 Secure Levers, 12 Changes, 1 Steel Bow



Per Dozen



Per Dozen

to. 73 — 2 ½ x4 in., Steel,
Double Link, 1 ½ in. from
Selvedge to Key Pin,
Screwed Box, 2 Secure
Levers, 12 Changes, 1 Malleable Iron Bow Key....\$15.50
Weight Per Dozen 5 ½ Pounds,
One-half Dozen in a Box.

# CHEST LOCKS

Cuts Half Size.



Weight Per Dozen 6 % Pounds. One-half Dozen in a Box.



Weight Per Dozen 1 Pound. One Dozen in a Box.

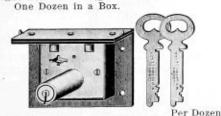


No. 0142P.

Per Dozen

No. 0140—1¼x1½ in., Brass, Double Round Link, ¾ in. from Selvedge to Center of Cylinder, Solid Box. Screwed, 3 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys, from ¾ in. Wood

Weight Per Dozen 1 Pound.

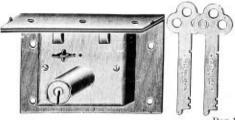


No. 0144P—1 % x2 ½ in., Brass, Dipped and Lacquered, Double Round Link, 1 in. from Selvedge to Center of Cylinder, Solid Box, Screwed, 4 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys, for %, 1 or 1 ½ in. Wood. . . . . . \$22.50 Weight Per Dozen 2 % Pounds.

One-half Dozen in a Box, Two of Each Length Cylinder.

## CHEST LOCKS

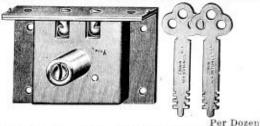
Cuts Half Size.



Per Dozer

Weight Per Dozen 5 1/2 Pounds.

One-half Dozen in a Box, Two of Each Length Cylinder.

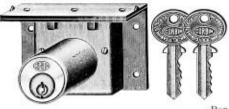


No. 078—Brass, Otherwise Same as No. 78...... 32.50 Weight Per Dozen 61/4 Pounds.

No. 79—2 14x4 in., 114 in. from Selvedge to Center of Cylinder, Otherwise Same as No. 78...... 32.50

No. 079—Brass, Otherwise Same as No. 79...... 38.00

Weight Per Dozen 7% Pounds. One-half Dozen in a Box.



Per Dozen

No. 0170—2x3 in., Brass, Double Link, 1 1/8 in. from Selvedge to Center of Cylinder, 1 1/8 in. Diameter Cylinder, Solid Square Box, Screwed, Pin Tumblers, Changes Unlimited, 2 Nickel Silver Keys, for 7/8, 1, 1 1/4, 1 1/2 or 1 1/4 in. Wood....\$66.00 Weight Per Dozen 6 Pounds.

No. 0171—2 ¼ x3 ½ in., 1 ¼ in. from Selvedge to Center of Cylinder, Otherwise Same as No. 0170. 73.00 Weight Per Dozen 7 ½ Pounds.

No. 0172-2 % x4 in., 1 ½ in. from Selvedge to Center of Cylinder, Otherwise Same as No. 0170.. 91.50

Weight Per Dozen 9 Pounds.

One in a Box.

## CHEST LOCKS

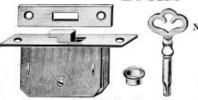
Cut Half Size.



ION Per Dozen
No. 0854—2 ¼ x3 ½ in.
Brass, Self-locking
Double Link, 1 ¼ in.
from Selvedge to
Center of Stem, Solid
Square Box, Screwed,
Nickel Plated Knob
and Dial, 15000
Changes, Combination can be Changed
Without Removing
Lock, Adjustable for
½ to 1 ½ in. Wood.

Weight Per Dozen 9 Lbs. One in a Box.

# SEWING MACHINE AND PIANO LOCKS

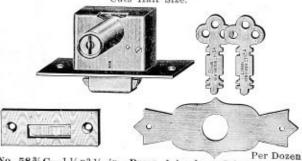


Cut Half Size.
Per Dozen
No. 864B—1 ½ x2 %
in., Brass Strike
and Selvedge, %
in. from Selvedge
to Center of Key
Hole, Silvered Escutcheon, Triangular Key...\$3,50

Weight Per Dozen 1 ½ Pounds. One Dozen in a Box.

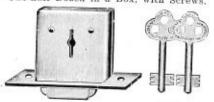
# DESK LOCKS

Cuts Half Size.



No. 58 \(^34\) C-1 \(^12\) x3 \(^14\) in. Brass, 1 in. from Selvedge to Center of Key Hole, Gold Plated Brass Cylinder, Screwed Case, 6 Brass Hooks, Self-locking, Secure Lever, Gilt Escutcheon, Self-locking Strike, 12 Changes, 2 Steel Double Bitted Keys, for 1 \(^12\) in. Wood. \$27.00

Weight Per Dozen 4 1/4 Pounds. One-half Dozen in a Box, with Screws.



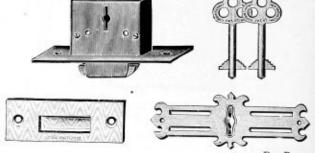


No. 47 % C-1 ½ x3 in., Brass, 1 in. from Selvedge to Center of Key Hole, Solid Square Box, Self-locking, 4 Secure Levers, Brass Escutcheon, Selfclosing Strike, 12 Changes, 2 Nickel Plated Bow Keys \$15.50

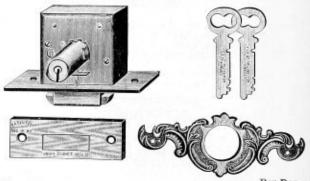
Weight Per Dozen 3 % Pounds. One Dozen in a Box, with Screws.

## DESK LOCKS

Cuts Half Size.

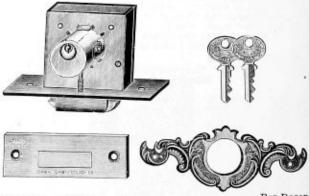


Weight Per Dozen 4 le Pounds. One-half Dozen in a Box, with Screws.



No. 41E—1%x3½ in., Brass, % in. from Selvedge to Center of Cylinder, Screwed Steel Box, Selflocking, 4 Secure Levers, Hook Bolt, Brass Tube, Cast Bronze Escutcheon, Self-closing Strike, 12 Changes, 2 Nickel Plated Steel Keys. \$46.50

Weight Per Dozen 6 1/8 Pounds. One-half Dozen in a Box, with Screws.

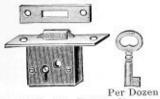


No. 42E—1 % x3 ¼ in., Brass, 1 in. from Selvedge to Center of Cylinder, † in. Diameter Gold Plated Ball Bearing Cylinder, Screwed, Self-locking, Brass Hooks, Cast Bronze Escutcheon, Selfclosing Strike, Changes Unlimited, 2 Nickel Silver Keys

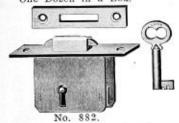
Weight Per Dozen 7 Pounds. One in a Box, with Screws.

# DESK LOCKS

Cuts Half Size.



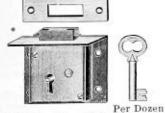
No. 881-1%x2 in., Brass, % in. from Selvedge to Key Pin, Screwed Case, 2 Levers, 12 Changes, 1 Flat Bow 



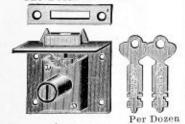
Per Dozen No. 880-1x2½ in., Brass Selvedge and Strike, % in. from Selvedge to Key Pin, Double Hook Bolt, 1 Flat Bow Steel Key . . . . . . . . . . . . . . . . 810 . 00

Weight Per Dozen 1¼ Pounds.

No. 882—1%x2% in., Brass
Selvedge and Strike. % in.
from Selvedge to Key Pin,
Double Hook Bolt, 1 Flat
Bow Steel Key 10 Bow Steel Key . . . . . 10.50 Weight Per Dozen 1½ Pounds. One Dozen in a Box.



No. 67-1%x2 in., Steel, % in. from Selvedge to Key Pin, Solid Box, Screwed, 2 Levers, Hook Bolt, 12 Changes, 1 Flat Bow Steel Weight Per Dozen 1 % Pounds. One Dozen in a Box.



No. 046-1 % x2 in., Brass, in. from Selvedge to Center of Cylinder, Screwed, Broad Heavy Hook Bolt, 2 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys, One Dozen in a Box.

# BOOK LOCKS

Cuts Half Size.



Closed.

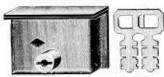
Partially Extended

Per Dozen No. 0871—Brass, Nickel Plated, Self-locking Double Link, 3 Levers, 12 Changes, 2 Nickel Plated Steel Keys, Adjustable for Books 1 1/4 to ..\$76.00 

No. 0872—Adjustable for Books 2 to 3½ in. Thick, Otherwise Same as No. 0871..102.00 Weight Per Dozen 3 Pounds. One-half Dozen in a Box, with Pins and Washers for Attaching.

# CASH BOX LOCKS

Cut Half Size.



Per Dozen

No. 819-1% x2 in., Steel, 1 in. from Selvedge to Center of Cylinder, Brass Double Link, Brass Tube Projects ¼ in., 2 Levers, 12 Changes, 2 Steel Double Bit-One Dozen in a Box.

# TILL LOCKS

Cuts Half Size.



Per Dozen No. 620—1 1/8 x1 1/2 in., Steel, Back Spring, 1/2 in. from Selvedge to Center of Key Pin, 1 Iron Key ...... \$2.40 Weight Per Dozen 76 Pound.

No. 622-1 % x2 in., Steel, Back Spring, % in. from Selvedge to Key Pin, 1 Ward, 1 Iron 3.00 Key ..... Weight Per Dozen % Pound. One Dozen in a Box.

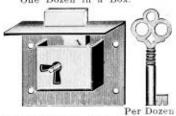
# TILL LOCKS

Cuts Half Size.



Per Dozen No. 626—1½x2¼ in., Steel, Back Spring, % in. from Selvedge to Key Pin, Double Key Hole, 1 Iron Key . . \$2.50 Weight Per Dozen 1 Pound.

No. 625—15 % x2 ¼ in., Steel, Back Spring, ¾ in. from Selvedge to Key Pin, Double Key Hole, 1 Iron Key ... 2.50 Weight Per Dozen 14 Pounds. One Dozen in a Box.



No. 634-2x2 1/2 in., Steel, Back Spring, 1 in. from Selvedge to Key Pin, Broad Bolt Double Keyhole, 1 Ward, 1 Iron .....84.00

Otherwise Same as No. Weight Per Dozen 2 Pounds. One Dozen in a Box.

## DRAWER LOCKS Cuts Half Size.



No. 450—1 ¼ x1 ½ in., Steel, ½ in, from Selvedge to Key Pin, Solid Box, Screwed, 2 Secure Levers, 12

Changes, 1 Steel Bow Key. \$10.50

No. 0450 — Brass, Otherwise
Same as No. 450 . . . . . . . . . 14.00

Weight Per Dozen ¾ Pound. No. 452—1½x2 in., Steel, ¾ in, from Selvedge to Key Pin, Screwed, Heavy Bolt, 2 Secure Levers, 12

Changes, 1 Steel Bow Key 10.50
No. 0452 — Brass, Otherwise
Same as No. 452...... 14.00
Weight Per Dozen 114 Pounds. One Dozen in a Box.

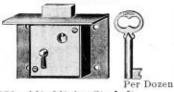


Per Dozen No. 430—1½x2 in., Steel, % in. from Selvedge to Key Pin, Solid Box, Broad Brass Bolt, 2 secure Levers, 12 Changes, 1 Steel Bow Key . \$10.50

Weight Per Dozen 114 Pounds. One Dozen in a Box.

## DRAWER LOCKS

Cuts Half Size.

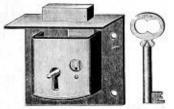


No. 431-1 1/2 x2 1/4 in., Steel, 1/8 in, from Selvedge to Key Pin, Solid Box, Broad Brass Bolt, 2 Secure Levers, 12 Changes, 1 Steel Weight Per Dozen 11/4 Pounds.

No. 457-1 % x2 ½ in., Steel, % in. from Selvedge to Key Pin, Solid Square Box, Screwed, Broad Heavy Bolt, 2 Secure Levers, 12 Changes, 1 Steel Bow Key. 11.25 No. 0457-Brass with Bronze

Key, Otherwise Same as No. 457 ...... 14.00

Weight Per Dozen 2 1/4 Pounds. One Dozen in a Box.



Per Dozen

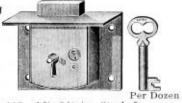
No. 04250-2x2 1/2 in., Brass, 1 in. from Selvedge to Key Pin, Solid Box, Broad Heavy Bolt, 1 Secure Lever, 3 Wards, 12 Changes, 1 Steel Bow Key.......\$12.50 Weight Per Dozen 2 1/4 Pounds.

No. 0425N-2 1/4 x2 1/2 in., 1 1/4 in, from Selvedge to Key Pin, Otherwise Same as 13.25

No. 0425M-2 1/2 x2 1/2 in., 1 1/2 in. from Selvedge to Key Pin, Otherwise Same as ... 13.25

No. 0425L-2 1/2 x2 1/4 in., 1 1/4 in. from Selvedge to Key Pin, Otherwise Same as No. 04250 ..... 14.00

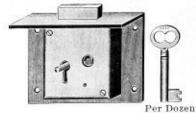
Weight Per Dozen 2 % Pounds. One Dozen in a Box.



No. 442-1 % x2 ½ in., Steel, % in, from Selvedge to Key Pin, Solid Box, Broad Heavy Bolt, 1 Secure Lever, 3 Wards, 12 Changes, 1 Steel Bow Key . . . . . . . \$11.25 Weight Per Dozen 2 Pounds. One Dozen in a Box.

# DRAWER LOCKS

Cuts Half Size.



No. 467-2 1/8 x2 1/4 in., Steel, 1 1/8 in. from Selvedge to Key Pin, Solid Square Box, Screwed, Broad Heavy Bolt. 2 Secure Levers, 12 Changes, 1 Steel Bow Key. \$13.25

No. 469-2 1/4 x3 in., Steel, 1 1/4 in, from Selvedge to Key Pin, Solid Square Box, Screwed, Broad Heavy Bolt, 2 Secure Levers, 12 Changes, 1 Steel Bow Key. 17.25

0469-Brass, Otherwise Same as No. 469 . . . . . . 21.00

Weight Per Dozen 3 Pounds. One Dozen in a Box.

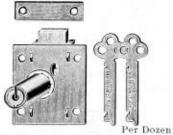


No. 699—1 % x1 % in., Steel, 1 % in. from Selvedge to Center of Cylinder, Broad Bolt, 2 Secure Levers, 36 Changes, 2 Nickel Plated Steel Keys, for % in.

Wood . . . . . . . . . . . . . 8 . 50

0699—Brass, Otherwise

Same as No. 699...... 10.50 Weight Per Dozen 2 % Pounds. One Dozen in a Box.



No. 0699 16 -- 1 1/8 x 1 1/8 in., Brass, % in. from Selvedge to Center of Cylinder, Broad Bolt, 2 Secure Levers, 36 Changes, 2 Nickel Plated Steel Keys, for ½, ¾ and

for % in. Wood, Otherwise Same as No. 0699 1/2 . . . . . 10 . 50

> Weight Per Dozen 2 Pounds. One Dozen in a Box.

# DRAWER LOCKS

Cuts Half Size.



Per Dozen

No. 0660 ½ —1 ½ x1 ½ in., Brass, ¾ in. from Selvedge to Center of Cylinder, 2 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys, One Dozen in a Box.





Per Dozen

No. 590 1/8 -- 1x1 1/2 in., Steel, 1/2 in, from Selvedge to Center of Cylinder, Solid Square Box, Screwed, 3 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys, One Dozen in a Box.



Per Dozen

No. 590—1 ½ x1 ¾ in., Steel, ¾ in, from Selvedge to Center of Cylinder, Broad Heavy Bolt, 2 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys, for % in. Wood.\$7.50 0590—Brass, Otherwise

No. 0590-Brass, Same as No. 590 . . . . . . . 9.50

Note-These Locks furnished on special order for any thickness of wood and if so ordered with All Keys alike. Weight Per Dozen 1 % Pounds. One Dozen in a Box.





Per Dozen

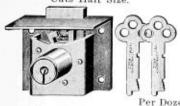
No. 0650-1 % x2 in., Brass, % in. from Selvedge to Center of Cylinder, Screwed. Broad Heavy Bolt, 2 Secure Levers, 12 Changes, 2 Nickel Plated Steel Double Bitted Keys, for 1/8 in. Wood ... 815.00 Weight Per Dozen 1% Pounds.

No. 0651-2x2 in., 1 1/4 in. from Selvedge to Center of Cylinder, Otherwise Same as 20.00

One Dozen in a Box.

# DRAWER LOCKS

Cuts Half Size.

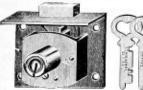


Per Dozen

No. 592 1/2 -- 1 1/8 x2 in., Steel, 1/8 in. from Selvedge to Center of Cylinder, Broad Bolt, 2 Secure Levers, 12 Changes, 2 Nickel Plated 

No. 0592 1/2 -Brass, Otherwise Same as No. 592 1/2 . . 13.00 Note-No. 05921/2 carried in stock

for 34, 78, 1, 1 18 and 1 14 in. wood. Also furnished for 38 in. wood with all keys alike when so ordered.





Per Dozen

No. 0675-1 % x2 in., Brass, % in. from Selvedge to Center of Cylinder, Cast Brass Box and Cylinder, Screwed, Broad Heavy Bolt, 3 Secure Levers, 100 Changes, 2 Polished Nickel Plated Steel Keys, for % in. Wood......\$13.25





Per Dozen

No. 0601-1% x2% in., Brass, % in. from Selvedge to Center of Cylinder, Solid Square Box, Screwed, Broad Heavy Bolt, Cylinder Cut for Both Cupboard and Drawer, 3 Secure Levers, 12 Changes, 2 Pol-ished Nickel Plated Steel Keys, for ½ in. Wood, Weight Dozen 2½ Lbs...\$21.00

No. 0602-1 % x2 1/2 in., Otherwise Same as No. 0601,

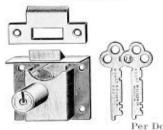
Weight Per Dozen 3 Lbs. 30.00 No. 0604-2x2 1/2 in., 1 in. from Selvedge to Center of Cylinder, Otherwise Same as No. 0601, Weight Per

from Selvedge to Center of Cylinder, Otherwise Same as No. 0601, Weight Per

Dozen 3 ¼ Lbs...... 34.00 No. 0608—2 ½ x2 ½ in., 1 ½ in. from Selvedge to Center of Cylinder, Otherwise Same as No. 0601, Weight Per Dozen 3 1/2 Lbs...... 36.50 One Dozen in a Box.

# DRAWER LOCKS

Cuts Half Size.

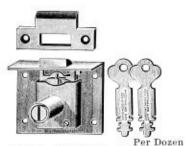


Per Dozen

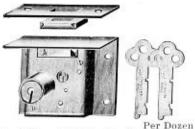
No. 590 34 -- 1 1/2 x1 34 in., Steel, ¾ in. from Selvedge to Center of Cylinder, Cast Bronze Latch Bolt, Brass Strike, Self-Locking, 2 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys, for % in. Wood...\$12.00

No. 0590% -Brass, Otherwise Same as No. 590 % . . . . . 16.00

Weight Per Dozen 1% Pounds. One Dozen in a Box,



No. 0650 1/2 -- 1 1/4 x2 in., Brass, % in. from Selvedge to Center of Cylinder, Cast Bronze Latch Bolt, Brass Strike, Self-Locking, Screwed, 2 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys, for % Weight Per Dozen 2 Pounds. One Dozen in a Box.

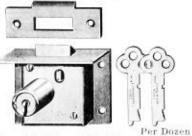


No. 0681-1 % x2 ¼ in., Bronze, % in. from Selvedge to Center of Cylinder, Cast Bronze Square Box and Cylinder, Screwed, Cast Bronze Latch Bolt, Heavy Cast Cast Bronze Strike, Self-Locking, 3 Secure Levers. 12 Changes, 2 Nickel Plated Steel Keys, for % in. Wood .....\$30.50

Weight Per Dozen 3 % Pounds. One Dozen in a Box.

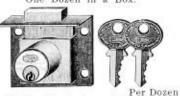
# DRAWER LOCKS

Cuts Half Size.



06011/2 -- 1 % x2 1/4 in., Brass, % in from Servedge to Center of Cylinder, Solid Square Box, Screwed, Broad Heavy Latch Bolt, Self-Locking, Cylinder Cut for Both Cupboard and Drawer, 3 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys, for % in. Wood...\$25.50

Weight Per Dozen 3 1/4 Pounds. One Dozen in a Box.

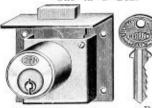


No. 0665—1½x2 in. Brass, ¾ in. from Selvedge to Center of Cylinder, Cylinder Diameter % in., Broad Heavy Bolt, Pin Tumblers, Changes Unlimited, 2 Nickel Silver Keys, for 7/8

from Selvedge to Center of Cylinder, Otherwise Same as No. 0665..... 43.50

Note—These locks are furnished for 1, 1%, 1%, 1% and 1% in. wood when so ordered at additional

Weight Per Dozen 2 % Pounds, One in a Box.



Per Dozen

No. 0686-2x2 1/4 in., Brass, 1 in, from Selvedge to Center of Cylinder, Cylinder Diameter 1% in., Broad Heavy Bolt, Pin Tumblers, Changes Unlimited. Nickel Silver Keys, for 38 or % in. Wood . . . . . . . \$50.50

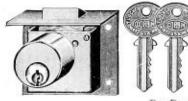
Note-These locks furnished for 1. 1 1/4, 1 1/4, 1 1/2 and 1 1/4 in. wood when so ordered at additional cost.

Weight Per Dozen 4 % Pounds. One in a Box. Pin Tumbler Locks can be fur-nished alike or Master Keyed, at ad-

ditional cost.

# DRAWER LOCKS

Cuts Half Size.



Per Dozen

No. 0686 1/2 -2x2 1/4 in., Brass, 1 in, from Selvedge to Center of Cylinder, Cylinder Diameter 1 % in., Broad Heavy Cast Bronze Latch ....\$58.00

No. 0666 1/2 -- 1 5/8 x2 in., Brass, 1/4 in. from Selvedge to Center of Cylinder, Cylinder Diameter % in., Otherwise Same as No. 0686 ½ . 49.50 Weight Per Dozen 514 Pounds. Note-These Locks furnished alike or Master-Keyed or for 1, 1%, 1%, 1%, 1% or 1% in, wood at additional cost. One Dozen in a Box.

# SUB-TREASURY LOCKS

Cuts Half Size.





Per Dozen

No. 0587D-1 % x1 1/2 in., Brass Plate, % in. from Selvedge to Center of Cylinder, Brass Cylinder Projects & in., Thin Brass Bolt, Screwed, 4 Screw Holes, 2 Large and 2 Small, 2 Sesecure Levers, 12 Changes, 2 Nickel Plated Steel One Dozen in a Box.



Per Dozen

No. 0587B-1 1/2 x1 1/2 in., Brass Plate, % in from Selvedge to Center of Cylinder, Brass Cylinder Projects 1/8 in., Thin Bolt, Screwed, 3 Screw Holes, 2 Secure Levers. 12 Changes, 2 Nickel Plated Steel Keys......\$10.00 Weight Per Dozen 2 Pounds.

No. 0587C — Brass Cylinder
Projects 7: in., 3 Large
Screw Holes, Otherwise
Same as No. 0587B..... 10.00 Weight Per Dozen 1% Pounds. One Dozen in a Box.

# SUB-TREASURY LOCKS

Cuts Half Size.



Per Dozen

No. 0359—1 1/4 x1 1/4 in., Brass, 5/4 in. from Selvedge to Center of Cylinder, Cyl-inder Projects 1/4 in., 2 Secure Levers, 12 Changes, 



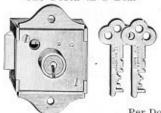
Per Dozen

No. 0363-1 1/8 x1 1/4 in., Brass, 5% in from Selvedge to Center of Cylinder, Cylinder Projects 1/8 in., Selflocking, 2 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys......\$11.50 Weight Per Dozen 1 % Pounds. One Dozen in a Box.





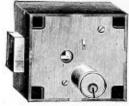
No. 582X—1½x1% in., Steel, Black Japanned, % in. from Selvedge to Center of Cylinder, Heavy Wrought Box, Screwed, Broad Heavy Brass Bolt Weight Per Dozen 3 1/8 Pounds. One Dozen in a Box.



Per Dozen No. 581X-1 1/2 x1 1/8 in., Steel, Black Japanned, % in. from Selvedge to Center of Cylinder, Heavy Wrought Box, Screwed, Cast Brass Latch Bolt, 3 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys, for \$5 or \$4 in. Wood . . \$16.25 Weight Per Dozen 3 1/8 Pounds. One Dozen in a Box.

# SUB-TREASURY LOCKS

Cuts Half Size.





No. 355. Per Dozen

No. 355 — 2x2 1/4 in., Steel, Black Japanned, 1% in. from Selvedge to Center of Cylinder, Nickel Plated Cylinder Projects & in., Heavy Wrought Box, Screwed, Broad Heavy Brass Bolt, 4 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys.....\$20.50

No. 356 - With Latch Bolt, Otherwise Same as No. 355 Described Above.... 20.50 Weight Per Dozen 4 1/2 Pounds. One-half Dozen in a Box.





Per Dozen No. 355W—3 ¼ x2 ¼ in., Steel, Black Japanned, 1 ¼ in. from Selvedge to Center of Cylinder, Nickel Plated Cylinder Projects † in., Heavy Wrought Box, Screwed, 4 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys.....\$21.00 Weight Per Dozen 5 Pounds. One-half Dozen in a Box.

# WICKET LOCKS

Cut Half Size.



Per Dozen

No. 0588L-1 1/2 x1 1/8 in., Brass, % in. from Selvedge to Center of Cylinder, Heavy Wrought Box, Screwed, Bolt Projects 1/4 in. Through Selvedge when Lock is Unlocked, 2 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys. \$17.00 Weight Per Dozen 2 Pounds. One in a Box, with Screws.

# MACHINE LOCKS

Cuts Half Size.



626 1/4 -1 1/4 x2 in., Steel, 3/4 in, from Selvedge to Key Pin, Back Spring, Double Key Hole, 1 Malleable Iron Weight Per Dozen 1 Pound. One Dozen in a Box.



Per

Dozen

No. 625 1/2 -- 1 1/8 x2 in., Steel, 3/4 in, from Selvedge to Key Pin, Back Spring, Double Key Hole, 1 Malleable Iron One Dozen in a Box.



No. 626 1/2 E-1 1/8 x2 in., Steel, 1/8 in. from Selvedge to Key Pin, Back Spring, Double Key Hole, 1 Malleable Iron One Dozen in a Box.



No. 634 1/2 -2x2 1/4 in., Steel, 1 in. from Selvedge to Key Pin, Back Spring, Broad Bolt, Double Key Hole, 1 Malleable Iron Bow Key . . . . . . . . . \$3.00 Weight Per Dozen 1% Pounds. One Dozen in a Box.



No. 526-1 1/2 x1 in., Steel, 5/8 in. from Selvedge to Key Pin, Back Spring, Double Key Hole, 1 Malleable Iron Bow ...\$1.50 Kev Weight Per Dozen 1 Pound. One Dozen in a Box.

# CUPBOARD LOCKS

Cuts Half Size.



No. 301-3 1/4 x1 in., Heavy Brass Selvedge, ½ in from Selvedge to Key Pin, Broad Bolt, 1 Tumbler, 1 Malleable Iron Bow Key . . . . . . . . \$14.00 Weight Per Dozen 2 Pounds.

No. 302-3 1/4 x1 1/4 in., 3/4 in. from Selvedge to Key Pin, Otherwise Same as No. 301.14.75 Weight Per Dozen 2 1/8 Pounds.

No. 303-3 1/4 x1 1/2 in., 1 in. from Selvedge to Key Pin, Otherwise Same as No. 301.... 17.50 Weight Per Dozen 2 1/2 Pounds.



No. 325-2 %x1 in., Steel, 1/2 in. from Selvedge to Key Pin, Brass Selvedge and Strike, Broad Heavy Cast Brass Latch Bolt, Self-locking, Double Key Hole, 4 Wards, 12 Changes, 1 Steel 

Note - Also furnished left-hand when so ordered. Cut shows right hand.

Weight Per Dozen 11/2 Pounds. One Dozen in a Box.



Per Dozen No. 316-3x1 1/2 in., Steel, 1/8 in. from Selvedge to Key Pin, Brass Selvedge, Solid Square Box, Screwed Made Right or Left Hand, Heavy Bolt, 2 Secure Levers, 12 Changes, 1 Steel Bow Key. \$14.00 Weight Per Dozen 1 % Pounds. One Dozen in a Box.

# CUPBOARD LOCKS

Cuts Half Size.



Per Dozen No. 310-2 % x1 % in., Steel, 1/2 in, from Selvedge to Key Pin, Brass Selvedge, Broad Heavy Bolt, Double Key Hole, 1 Tumbler, 1 Mallea-

Weight Per Dozen 1 1/4 Pounds.

No. 310 1/2 -- 2 5/8 x1 1/4 in., 3/4 in. from Selvedge to Key Pin, Otherwise Same as No. 310, 3,25

No. 311 - 2 % x1 % in., % in. from Selvedge to Key Pin, Otherwise Same as No. 310. 3.50 Weight Per Dozen 1 % Pounds.

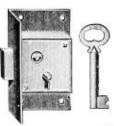
No. 312-2 % x1 1/2 in., 1 in. from Selvedge to Key Pin, Otherwise Same as No. 310 . . . . 4.00 Weight Per Dozen 1% Pounds. One Dozen in a Box.



Per Dozen

No. 0260-2x % in., Brass, % in. from Selvedge to Key Pin, Square Selvedge, Brass Bolt, Solid Square Box, Screwed. Made Right or Left Hand, 1 Secure Lever, 4 Changes, 1 

Weight Per Dozen % Pound. One Dozen in a Box.



Per Dozen

No. 0270-2 1/2 x1 1/2 in.. Brass, % in. from Selvedge to Key Pin, Square Selvedge, Brass Bolt, Solid Box, Screwed, Made Right or Left Hand, 1 Secure Lever, 4 Changes, 1 

Weight Per Dozen 1 % Pounds. One Dozen in a Box.

## CUPBOARD LOCKS

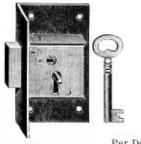
Cuts Half Size



Per Dozen

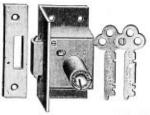
No. 0262-2 1/2 x1 1/8 in., Brass, % in. from Selvedge to Key Pin. Square Selvedge. Solid Box, Screwed, Made Right or Left Hand, 2 Secure Levers, 12 Changes, 1 Steel Bow Key......\$10.50 Weight Per Dozen 1 1/2 Pounds.

One Dozen in a Box.



Per Dozen No. 0280-3x1 % in., Brass, 7% in. from Selvedge to Key Pin, Square Selvedge, Solid Box, Screwed, Broad Bolt, Made Right or Left Hand, 2 Secure Levers, 12 Changes, 1 Steel Bow Key. \$14.00 Weight Per Dozen 2 1/4 Pounds.

One Dozen in a Box.



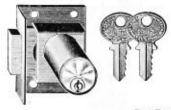
Per Dozen

No. 0329-For Sliding Doors, 2 1/4 x1 1/6 in., Brass, 11 in. from Selvedge to Center of Cylinder, Square Selvedge, Brass Strike, Solid Square Box, Screwed, Hook Bolt, 4 Secure Levers, May be Locked without Using Key by Turning Knurled Center in Tube Slightly to the Left. 12 Changes, 2 Nickel Plated Steel Keys, for % in. Wood.\$2.80 Weight Per Dozen 2 Pounds.

One Dozen in a Box.

# CUPBOARD LOCKS

Cuts Half Size



Per Dozen

No. 0370A—2x1½ in., Brass, % in. from Selvedge to Center of Cylinder, Square Selvedge, Broad Heavy Bolt, % in Diameter Cyl-inder, Pin Tumblers, Changes Unlimited, 2 Nickel Silver Keys for % in. Wood ......\$43.50 Weight Per Dozen 3 Pounds. One in a Box.



Per Dozen

No. 076814-15 x1 1/4 in., Brass, % in. from Selvedge to Center of Cylinder, Cast Bronze Latch Bolt, Made Right or Left Hand, % in, Diameter Cylinder, Brass Strike, Pin Tumblers, Changes Unlimited, 2 Nickel Silver Keys, 

Note-Furnished for 1, 1%, 14 or 1% in. Wood, when so Ordered, at Additional Cost.

Weight Per Dozen 4 Pounds. One in a Box, with Screws.



Per Dozen

No. 0252-2x1 1/2 in., Brass, 3/4 in. from Selvedge to Center of Cylinder, Cast Bronze Latch Bolt, Made Right or Left Hand, 1 1/8 in. Diameter Cylinder. Brass Strike, Pin Tumblers, Changes Unlimited, 2 Nickel Silver Keys, for 1/8 

Note-Furnished for 1, 11/8, 11/4 or 1% in. Wood when So Ordered at Additional Cost.

Weight Per Dozen 6 1/2 Pounds. One in a Box, with Screws.

# CHIFFONIER LOCKS

Cuts Half Size

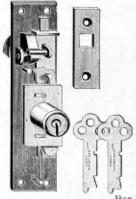


Per Dozen

No. 0800-3 1/2 x1 in., Brass, High Pin and Tube, 1 Se-cure Lever, 1 Fine Brass Key, Buffed and Lac-quered, for % in. Wood..\$19.00 Weight Per Dozen 2 % Pounds. One Dozen in a Box.

# SHOW CASE LOCKS

Cuts Half Size



Per Dozen

No. 02295 1/2 -- 4 1/2 x1 in., Brass, Cast Brass Hook Bolt, Made Right or Left Hand, Brass Strike, 3 Secure Levers, 12 Chnges, 2 Nickel Plated Steel Keys, for % 

Note-Furnished for 1 1/8 in. Wood when So Ordered.

Weight Per Dozen 2 % Pounds. One Dozen in a Box.



Per Dozen

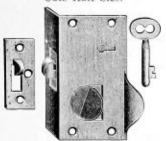
No. 0342-1%x1% in., Brass, % in., from Selvedge to Center of Cylinder, Square Selvedge, Solid Box, Hook Bolt, Made Right or Left Hand, Brass Strike, 2 Secure Levers, 2 Nickel Plated Steel Keys, for 7/8 in. Wood ......

.\$15.50 Weight Per Dozen 1 % Pound.

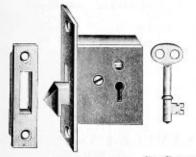
One in a Box.

# SHOW CASE LOCKS

Cuts Half Size.



Per Dozen No. 02299—2 % x1 ½ in., Cast Bronze, Buffed and Lacquered, Spring Catch, 1 Tumbler, Solid Bronze Key ..... \$24.50 Weight Per Dozen 3 % Pounds. One Dozen in a Box.



Per Dozen No. 02297-2 % x1 % in., Bronze, 1 in. from Selvedge to Center of Key Hole, Cast Bronze Catch, Reversible, Cast Bronze Strike, Self-Locking, 1 Secure Lever, 1 Solid Bronze Key . . . . . . \$21.50 Weight Per Dozen 3 1/2 Pounds. One in a Box.

# WARDROBE LOCKS

Cuts Half Size.



Per Dozen No. 700-1%x% in., Steel, Solid Square Box, Bolt Shoots Right and Left, 1 Tumbler,

No. 0700—1 % x % in., Brass, Solid Square Box, Bolt Shoots Right and Left, 1 Tumbler, 1 Steel Bow Key. 7.00 Weight Per Dozen % Pound.

One Dozen in a Box.

# WARDROBE LOCKS

Cuts Half Size.



Per Dozen No. 701B-2x1 in., Steel, Unpolished, Solid Square Box. Bolt Shoots Right and Left. 1 Tumbler, 1 Malleable Iron Bow Key . . . . . . . . . . \$2.00 Weight Per Dozen 11/4 Pounds.

No. 702B-2 1/2 x1 1/4 in., Otherwise Same as No. 701B... 2.25 No. 702 — Polished, Otherwise Same as No. 702B..... 3.25 Weight Per Dozen 11/2 Pounds. One Dozen in a Box.



No. 704-3x1 % in., Steel, Solid Square Box, Bolt Shoots Right and Left, 1 Tumbler, 1 Malleable Iron Bow Key. 82.25 Weight Per Dozen 2 % Pounds.

No. 709—3½x2 in., Steel, Solid Square Box, Broad Bolt Shoots Right and Left, 1 Tumbler, 1 Ward, 1 Malle-able Iron Bow Key..... 6.25 Weight Per Dozen 2 % Pounds.

No. 710-3½x1¾ in., Otherwise Same as No. 769.... 6.00 Weight Per Dozen 2 % Pounds. One Dozen in a Box.



Per Dozen No. 704 1/2 - 3x1 1/4 in., Steel, Coppered, Solid Square Box, Bolt Shoots Right and Left, 1 Tumbler, 1 Fancy Bronze Key ......\$4.50 Weight Per Dozen 2 % Pounds. One Dozen in a Box.

# WARDROBE LOCKS

Cuts Half Size.



Per Dozen No. 712-3 1/2 x2 in., Steel, Solid Square Box, Broad Heavy Bolt Shoots Right and Left, 2 Secure Levers, 12 Changes, 1 Malleable Iron 

No. 714—4x2 ¼ in. Otherwise Same as No. 712....... 8.50 Weight Per Dozen 4 ½ Pounds.

No. 723—3x1 ¼ in., Steel, Solid Square Box, Heavy Steel Bolt Shoots Right and Left, 

Weight Per Dozen 2 1/2 Pounds. One Dozen in a Box.



Per Dozen No. 718—1 % x % in., Steel, Solid Box, Brass Bolt in., Steel, Shoots Right and Left, 2 Secure Levers, 12 Changes, 1 Steel Bow Key ...... \$14.00 No. 0718—Brass, Bronze Key,

No. 0719-Brass, Bronze Key,

No. 720—2% x1¼ in, Otherwise Same as No. 718.... 12.25 No. 0720—Brass, Bronze Key,

Otherwise Same as No. . . . . . . . . . . . . . . . 17 . 50

Weight Per Dozen 1% Pounds. No. 722 — 3x1¼ in., Solid Square Box, Screwed, Otherwise Same as No. 718.. 14.25

No. 0722-Brass, Bronze Key, Otherwise Same as No. 722 ..... 19.00 Weight Per Dozen 2 Pounds. One Dozen in a Box.

# WARDROBE LOCKS

Cuts Half Size



No. 726.

Per Dozen No. 725-3 1/2 x2 in., Steel, Solid Square Box, Heavy Steel Bolt Shoots Right and Left, 2 Secure Levers, 1 Malleable Iron Bow Key . . \$14.00

No. 726-Screwed Box, Brass Bolt, Otherwise Same as One Dozen in a Box.



No. 0726.

Per Dozen

No. 0724-3x1 % in., Brass, Solid Square Box, Screwed, Broad Heavy Bolt Shoots Right and Left, 2 Secure Levers, 12 Changes, 1 Solid Bronze Key..... \$19.00 Weight Per Dozen 2 % Pounds.

No. 0726—3 1/2 x2 in., Other-wise Same as No. 0724... 17.00 Weight Per Dozen 3 1/8 Pounds.

No. 0727-4x2 1/2 in., Otherwise Same as No. 0724..... 28.00 Weight Per Dozen 5 % Pounds. No. 0727, One-half Dozen, Others, One Dozen in a Box.



No. 749—1 % x % in., Steel, Solid Box, Brass Bolt Shoots Right and Left, 2 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys, for 3 in. Wood . . . . . . . . \$13.50

No. 0749—Brass, Otherwise Same as No. 749...... 16.25 Weight Per Dozen 1½ Pounds. One Dozen in a Box.

# WARDROBE LOCKS

Cuts Half Size



Per Dozen

No. 750-2 % x1 % in., Steel, Solid Box, Screwed, Broad Heavy Brass Bolt Shoots Right and Left, 2 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys, for %, 1 and 1% in.

No. 0751-3x1 % in., Brass, Otherwise Same as No. 750, 22.50 Weight Per Dozen 3 Pounds.

No. 0752—3 1/2 x2 in., Brass, Otherwise Same as No. 750. 31.50 Weight Per Dozen 4 1/8 Pounds. One-half Dozen in a Box.

Note-The Above Locks can be Furnished for 14, 13, 14 and 14 in. Wood or Master Keyed at Additional Cost. Also Keyed Alike at No Additional Cost.



Per Dozen

No. 0760-2 1/2 x1 1/2 in., Brass, Solid Square Box, Screwed, Broad Heavy Bolt Shoots Right and Left, 1 1/8 in. Diameter Cylinder, Pin Tum-blers, Changes Unlimited. 2 Nickel Silver Keys, for 34 and 36 in. Wood . . . . \$61.00 Note—Furnished for 1, 136, 134

and 1% in. Wood, Also Master Keyed at an Additional Cost.

Weight Per Dozen 5 1/4 Pounds. One in a Box.



Per Dozen

No. 0768-15 x1 1/4 in., Brass, Solid Box, Screwed, Heavy Brass Bolt for Either Right or Left Hand, % in. Diameter Cylinder, Pin Tumblers, Changes Unlimited, 2 Nickel Silver Keys, for % in. Wood........\$47.00 Note—Furnished for 1 and 1% in.

Wood at an Additional Cost. Weight Per Dozen 3 1/2 Pounds. One in a Box, with Screws.

# LOCKER LOCKS

Cut Half Size.

Per Dozen

No. 755-2x1 1/2 in., Steel, 1 1/4 in, from Selvedge to Center of Cylinder, Heavy Brass Bolt Projects % in. for Either Right or Left Hand, Square Box, 5 Secure Levers, 16800 Changes, 2 Nickel Plated Steel Keys, for 1/8 in. Wood ......\$22.50

No. 755M-Master Keyed, Otherwise Same as No. 755.. 25.00

0755-Brass, Otherwise Same as No. 755..... 25.50 No. 0755M-Master Keyed,

Otherwise Same as No. 0755 ..... 27.50

Weight Per Dozen 4 % Pounds. One-half Dozen in a Box.

Note-Furnished for 1, 11/8, 11/4 and 1% in. Wood when So Ordered at No Extra Cost.

# SAMPLE CASE LOCKS

Cuts Half Size





#### Brass

2 1/2 in. Extra Heavy, Self-Locking, 2 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys.

No. 108614 -Buffed and Lacquered ......\$13.50

No. 1086-Nickel Plated, Buffed ..... 14.50 Weight Per Dozen 3 1/4 Pounds. One Dozen in a Box.



Brass

1% in., Self-Locking, 1 Flat Bow Key.

Per Dozen No. 1098-Buffed and Lacquered ..... \$11.50

No. 10981/2—Nickel Plated, Buffed ...... 12.00 Weight Per Dozen % Pound. One Dozen in a Box.

# SAMPLE CASE LOCKS

Cut Half Size.



Cast Brass

3 in., Solid Box, Self-locking, 1 Tumbler, 1 Flat Bow Key.

Weight Per Dozen 1 % Pounds.

One Dozen in a Box.

# AUTOMOBILE TOOL BOX LOCKS

Cuts Half Size.



Per Dozen

No. 01835—3 ¼ x2 ¼ in., Brass, Polished, Buffed and Lacquered, 1 Secure Lever, 1 Nickel Plated Steel Key., \$11.00

Weight Per Dozen 3 Pounds.

One Dozen in a Box.



Per Dozen

No. 01214 ½ — 2 15 x 2 fs in., Brass, Polished, Buffed and Nickel Plated, Spring Drop, 1 Secure Lever, 1 Nickel Plated Bow Key. \$13.00

Weight Per Dozen 311 Pounds.

One Dozen in a Box.

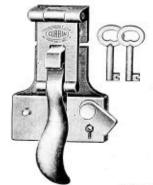
# AUTOMOBILE TOOL BOX LOCKS

Cuts Half Size.



Weight Per Dozen 51/2 Pounds.

One Dozen in a Box, with Screws.



Per Dozen

No. 1217 — 3 1/8 x 2 1/4 in. Over All. Cast Brass, Buffed and Lacquered, Self-locking, 2 Secure Levers, 2 Nickel Plated Steel Keys. \$20.00

Can be locked without using key by pressing button. The lever serves as a substantial locking link, as a lift handle when unlocked, and when drawn into the locking position it draws the cover down tightly preventing any rattle.

Weight Per Dozen 5½ Pounds. One Dozen in a Box.

# SUIT CASE CATCHES

Cut Half Size.



Per Gross

No.  $01882\frac{14}{3}$  —  $2\frac{7}{16}$  in., Brass, Buffed and Lacquered... \$20.00No.  $01882\frac{14}{2}$  —  $2\frac{7}{16}$  in., Brass, Nickel Plated......... 20.00

Weight Per Gross 11 1/8 Pounds.

One Dozen in a Box.

# SUIT CASE CATCHES

Cut Half Size



Per Gross
No. 01883 ¼ — 2 in., Brass,
Buffed and Lacquered... \$20.00

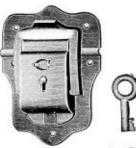
No. 018831/2 — 2 in., Brass, Nickel Plated . . . . . . . . 20.00

Weight Per Gross 51/4 Pounds.

One Dozen in a Box.

# SUIT CASE LOCKS

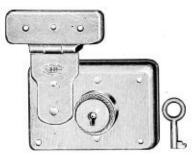
Cuts Half Size.



Per Dozen

Weight Per Dozen 2% Pounds.

One Dozen in a Box.



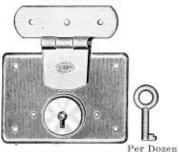
Per Dozen

Weight Per Dozen 3 Pounds.

One Dozen in a Box.

## SUIT CASE LOCKS

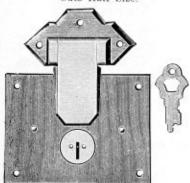
Cuts Half Size.



No. 15778-2x3 in., Brass, Buffed and Lacquered, Self-locking, Movable Escutcheon, When Unlocked May be Used as a Catch, Cast Brass Spring Hasp, 1 Secure Lever, 1 Brass Plated Malleable Iron One Dozen in a Box.

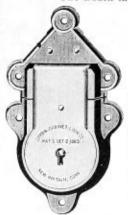
# TRUNK LOCKS

Cuts Half Size.



Per Dozen No. 1435—3½ in., Steel, Black Japanned, Heavy Malleable Iron Spring Hasp, Brass Escutcheon, 1 Flat Steel Key . \$4.50 Weight Per Dozen 3 % Pounds. 

Weight Per Dozen 5 % Pounds. One Dozen in a Box.



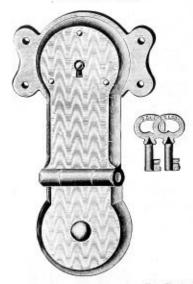


Per Dozen No. 01134-5x 2 % in., Iron, Brass Plated Frame and Center, Spring Hasp, 1 Malleable Iron Key, Wt. Per Dozen 4 1/2 Pounds. One Dozen in a

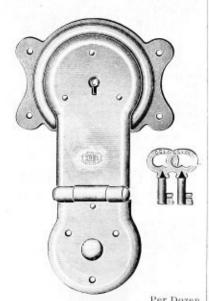
Box.

# TRUNK LOCKS

Cuts Half Size.



Per Dozen No. 1003 — 6 ¼ x3 ½ in., Cast Bronze, Buffed Edges, 2 Secure Levers, 3 Changes, 2 Nickel Plated Steel Key: . \$26.00 Weight Per Dozen 8 1/2 Pounds. One Dozen in a Box, with Bolts, Nuts and Washers.

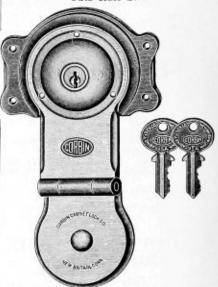


No. 01256 12 P-6 1/2 x3 1/4 inches. Wrought Steel, Brass Plated, Heavy Guard Cup, 2 Secure Levers, 3 Changes, 2 Nickel Plated Steel Keys. \$6.75 Weight Per Dozen 7 1/8 Pounds.

One Dozen in a Box, with Bolts, Nuts and Washers.

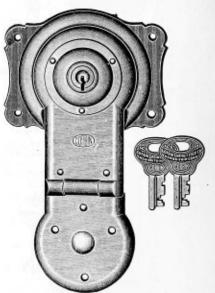
# TRUNK LOCKS

Cuts Half Size.



Per Dozen No. 1016P—6 ½x3 ¾ in., Cast Bronze, Finely Finished. Heavy Guard Cup, Self-locking, Pin Tumbler, Changes Unlimited, 2 Nickel Silver 

Weight Per Dozen 18 1/8 Pounds. One-half Dozen in a Box, with Bolts, Nuts and Washers.



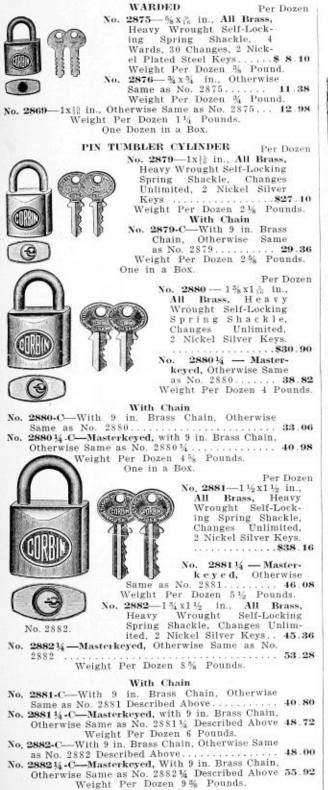
Per Dozen 01269 14 -- 6 1/2 x 3 3/4 inches. Wrought Steel, Brass Plat-

Weight Per Dozen 10 Pounds. One Dozen in a Box, with Bolts, Nuts and Washers

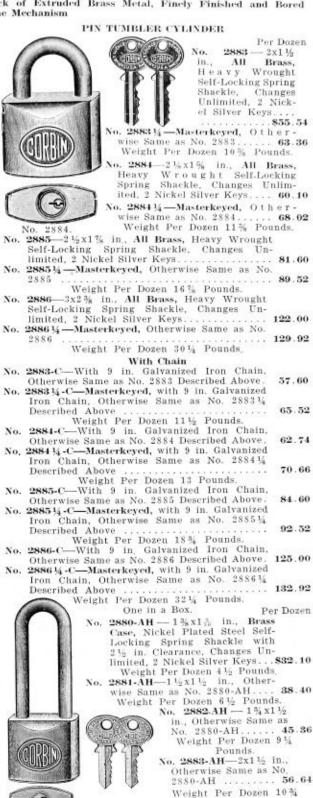
# EXTRUDED METAL PADLOCKS

CORBIN

Corbin Extruded Metal Padlocks are Made from a Solid Block of Extruded Brass Metal, Finely Finished and Bored Out to Receive the Mechanism

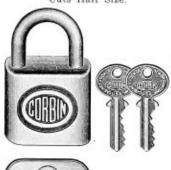


One in a Box.



Pounds. One in a Box.

Cuts Half Size.



Per Dozen No. 0986—2x1¾ in., Heavy Cast Bronze Case, Nickel Plated Steel Self-locking Spring Shackle, Brass Cylinder. Pin Tumblers, Changes Unlimited, 2 Nickel Silver Keys.......\$54.00

Weight Per Dozen 9 % Pounds. One in a Box.



Per Dozen No. 2813 ¼ — 1 ½ x1 ¼ in., Rustless Finish Wrought Steel Case, Nickel Plated Steel Self-locking Spring Shackle, Brass Cylinder, Pin Tumblers, Changes Unlimited, 2 Nickel Silver Weight Per Dozen 31/4 Pounds.



No. 2814 1/4 -2x1 1/2 in., Rustless Finish Wrought Steel Case, Nickel Plated Steel Self-locking Spring Shac-kle, Brass Cylinder, Pin Tumblers, Changes Un-limited, 2 Nickel Silver Weight Per Dozen 6 % Pounds.

Per Dozen

One in a Box.

# PADLOCKS

Cuts Half Size.



Per Dozen No. 0966 -11/4 in., Profiled Finish Wrought Brass Case and Self-locking Spring Shackle, Brass Cylinder, Pin Tumblers, Changes Unlimited, 2 Nic-

Weight Per Dozen 3 % Pounds. One in a Box.



No. 2882X—1 % x1% in., Ex-tended Brass Metal Case, Steel Wire Adjustable and Removable Shackle, Ad-justable in Clearance from % in. to 1% in., Dust Guard Over Key Way, Pin Tumblers, Changes Un-Tumblers, Changes limited, 2 Nickel Silver Keys ......\$43.20

Weight Per Dozen 7% Pounds. One in a Box.



Per Dozen

No. 0995—2¼ in., Polished Cast Gun Metal Case and Self-Locking Spring Shackle, 6 Secure Levers, 3000 Changes, 2 Nickel Plated Steel Keys ......\$20.32

No. 0995-A - Polished Cast Brass Case and Shackle, Otherwise Same as No. 0995 ............ ... 16.70 Weight Per Dozen 5 1/2 Pounds.

With Chain

No. 0995-C-With 9 in. Steel One-half Dozen in a Box.

# PADLOCKS

Cuts Half Size.



Per Dozen No. 990-2 in., Rustless Finish Cast Iron Case, Cast Bronze Self-locking Shackle, Pin Tumblers, 144 Changes, 2 Flat Steel Keys ......\$27.72

> Weight Per Dozen 8 Pounds. One Half Dozen in a Box.



Per Dozen No. 9889—1½ in.. Rustless Finish Cast Iron Case, Cast Bronze Self-locking Shackle, Pin Tumblers, 144 Changes, 2 Flat Steel 

Weight Per Dozen 4 % Pounds. One-half Dozen in a Box.



Per Dozen No. 2967-2 in., Rustless Finish Wrought Steel Case, Drop Forged Steel Selflocking Spring Shackle, 4 Secure Levers, 144 Changes, 2 Nickel Plated Corrugated Steel Keys....\$34.30

Weight Per Dozen 6 1/4 Pounds. One-half Dozen in a Box.

Cuts Half Size.



Per Dozen

No. 2970—1 in., Cast Bronze Case and Self-locking Spring Shackle, 3 Secure Levers, 48 Changes, 2 Coined Nickel Silver Keys .......\$27.36 Weight Per Dozen 1 5% Pounds.

No. 2971—14 in., Otherwise Same as No. 2970...... 29.52 Weight Per Dozen 2 Pounds.

No. 2972—1½ in., Otherwise Same as No. 2970..... 33.12 Weight Per Dozen 3¾ Pounds,

No. 2973—1 % in., 4 Secure Levers, 72 Changes, Otherwise Same as No. 2970...... 36.72 Weight Per Dozen 4 % Pounds.

No. 2974—2 in., 4 Secure Levers, 144 Changes, Otherwise Same as No. 2970...... 41.04 Weight Per Dozen 7 % Pounds. One-half Dozen in a Box.



Per Dozen

No. 09855A—1% in., Cast Brass Case, Nickel Plated Steel Removable Ratchet Shackle, Shackle Adjustable in Clearance from ½ in. to 4% in., 12 Changes, 2 Nickel Plated Corrugated Steel Keys....\$14.52

The offset bottom makes it convenient to easily insert key in keyway.

Weight Per Dozen 6 Pounds. One-half Dozen in a Box.

# PADLOCKS

Cuts Half Size.



Per Dozen

No. 09838—1% in., Cast Brass
Case, Nickel Plated Steel
Removable Ratchet Shackle,
Shackle Adjustable in Clearance from 1 in. to 2 in., 18
Changes, 2 Nickel Plated
Corrugated Steel Keys...\$14.40
Weight Per Dozen 5% Pounds.
One-half Dozen in a Box.



Per Dozen

No. 9863-M—1½ in., Rustless Finish Wrought Steel Case, Nickel Plated Wrought Steel Self-locking Spring Shackle with 1¾ in. Clearance, 3 Secure Levers, 48 Changes, 2 Nickel Plated Steel Keys. \$23.32 Weight Per Dozen 3½ Pounds.

No. 9863-H—Shackle with 2½ in. Clearance, Otherwise Same as No. 9863-M.....25.78 Weight Per Dozen 3¾ Pounds. One-half Dozen in a Box.



Per Dozen

No. 09828-H-1% in., Otherwise Same as No. 09827-H..... 9.76 Weight Per Dozen 2% Pounds. One Dozen in a Box.

# PADLOCKS

Cuts Half Size.



Per Dozen

No. 2972-R — 1½ in., Cast Bronze Case, Nickel Plated Iron Wire Self-locking Spring Shackle, 3 Secure Levers, 48 Changes, 2 Coined Nickel Silver Keys. \$34.00

Weight Per Dozen 3% Pounds. One-half Dozen in a Box.



Per Dozen

No. 09862—2 in., Cast Brass Case, Wrought Brass Selflocking Spring Shackle, 4 Wards, 12 Changes, 2 Nickel Plated Flat Steel Keys. \$14.40 Weight Per Dozen 6 Pounds,

Weight Per Dozen 6 Poun One-half Dozen in a Box.



Per Dozen

No. 02827—1 % in., Cast Brass
Case, Wrought Brass Selflocking Spring Shackle, 12
Changes, 2 Nickel Plated
Corrugated Steel Keys, 1
Master Key with Each
Dozen .....................\$10.20
Weight Per Dozen 3 Pounds.

#### With Chain

in a Bax.

Cuts Half Size.



No. 09899-2 in., Cast Bronze Case, Cast Brass Self-Locking Spring Shackle, 6 Secure Levers, 144 Changes. 2 Nickel Silver Milled Weight Per Dozen 6 Pounds. One-half Dozen in a Box.



Per Dozen

No. 9863—1½ in., Rustless Fin-ish Wrought Steel Case, Nickel Plated Wrought Steel Self-Locking Spring Shackle, 3 Secure Levers, 48 Changes, 2 Nickel Plated No. 9865-2 in., Otherwise Same

No. 09865—Wrought Brass Case, Otherwise Same as Weight Per Dozen 5 1/4 Pounds.

One-half Dozen in a Box.



No. 09828.

Per Dozen No. 09827—1¼ in., Polished Cast Brass Case, Nickel Plated Wrought Steel Self-Locking Spring Swivel Shackle, 6 Changes, 2 Nickel Plated Steel Keys.....\$7.26 Weight Per Dozen 1 1/2 Pounds.

No. 09828—1 % in., Otherwise Same as No. 09827..... 9.16 Weight Per Dozen 3 % Pounds. One Dozen in a Box.

# PADLOCKS

Cuts Half Size.



Per Dozen No. 02829—2 1/8 in., Polished Cast Brass Case, Nickel Plated Steel Self-Locking Spring Swivel Shackle, 6 Changes, 2 Nickel Plated 

Weight Per Dozen 5 1/4 Pounds. One-half Dozen in a Box.



Per Dozen No. 98114-2 in., Black Japanned Wrought Steel Case, Nickel Plated Steel Self-Locking Spring Swivel Shackle, 6 Changes, 2 Nickel Plated Corrugated Steel 

Weight Per Dozen 3 1/4 Pounds. One Dozen in a Box.



Per Dozen No. 9884—1% in., Bower-Barffed Cast Iron Case, Nickel Plated Panels, Heavy Steel Nickel Plated Steel Self-Locking Spring Shackle, Warded Mechanism, 6 Changes, 2 Nickel Plated Flat Steel 

Weight Per Dozen 3 % Pounds. One Dozen in a Box.

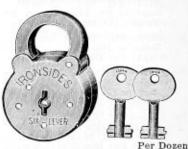
# PADLOCKS

Cuts Half Size.



No. 09835—2 1/8 in., Polished Cast Brass Case, Copper Plated Wrought Steel Self-Locking Spring Shackle, 6 Changes, 2 Nickel Plated 

Weight Per Dozen 4 % Pounds. One-half Dozen in a Box.

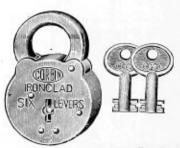


No. 91514 G-2 in., Galvanized Steel Case and Cast Iron Self-Locking Spring Shackle, 6 Brass Secure Levers, Weight Per Dozen 4 % Pounds.

## With Chain

No. 915 14 GC-With 9 in. Steel Chain, Otherwise Same as No. 915 ¼ G . . . . . . . . . . 9.30

> Weight Per Dozen 5 % Pounds. One Dozen in a Box.



Per Dozen No. 9925 1/6 -- 2 in., Brass Plated Wrought Steel Case, Brass Plated Malleable Iron Self-Locking Spring Shackle, 6 Secure Levers, 12 Changes, 2 Brass Plated Malleable 

Weight Per Dozen 4 % Pounds. One Dozen in a Box.

Cuts Half Size.



Per Dozen

No. 02865½—2½ in., Polished Cast Bronze Case and Self-Locking Spring Shackle, 3 Wards, 2 Secure Levers, 12 Changes, 2 Nickel Plated Malleable Iron Keys...\$13.98

Weight Per Dozen 51/4 Pounds.

One-half Dozen in a Box.



Per Dozen

No. 02860 1/2 - 1 1/4 in., Polished Cast Bronze Case and Self-Locking Spring Shackle, 3 Wards, 2 Secure Levers, 12 Changes, 2 Nickel Plated Malleable Iron Keys....\$11.56

Weight Per Dozen 4 Pounds.

One Dozen in a Box.



Per Dozen

No. 2843—2 in., Black Japanned
Wrought Steel Case, Nickel
Plated Malleable Iron SelfLocking Spring Shackle,
Shackle Locked at Both
Ends, Secure Levers and
Wards, 12 Changes, 2 Nickel Plated Steel Keys.....\$8.40

Weight Per Dozen 3 1/2 Pounds.

One Dozen in a Box.

# PADLOCKS

Cuts Half Size.



Per Dozer

Weight Per Dozen 3 4 Pounds. One Dozen in a Box.



No. 92616—2 in., Brass Plated Steel Case, Brass Plated Malleable Iron Self-Locking Spring Shackle, 6 Brass Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys. .\$4.80 Weight Per Dozen 4.5 Pounds. One Dozen in a Box.



Por Dozo

No. 9902 14 — 1 % in., Black Japanned Wrought Steel Case, Brass Plated Malleable Iron Self-Locking Spring Shackle, 5 Changes, 2 Nickel Plated Steel Keys......\$3.30

No. 9902 4 — Brass Plated Steel
Case, Otherwise Same as
No. 9902 4 . . . . . . . . . . . . . 3 · 30
Weight Per Dozen 2 ½ Pounds.
One Dozen in a Box.

# PADLOCKS

Cuts Half Size.



Per Dozen

No. 2960 ¼—2 in., Black Japanned Wrought Steel Case,
Brass Plated Cast SelfLocking Spring Shackle, 6
Changes, 2 Nickel Plated
Malleable Iron Keys.....\$3.30



No. 295434.

Per Dozen

No. 2953 % -B-1 % in., Brass Plated Wrought Steel Case, Black Center, Brass Plated Malleable Iron Self-Locking Spring Shackle, 6 Changes, 2 Nickel Plated Steel Keys. \$2.74 Weight Per Dozen 1 Pound.

No. 2954 34 · B — 1 ½ in., Otherwise Same as No. 2953 34 · B 3 · 02 Weight Per Dozen 1 % Pounds.

Weight Per Dozen 1 % Pounds, No. 2955 34-B—1 % in., Otherwise Same as No. 2953 34... 3.30 Weight Per Dozen 2 14 Pounds.

No. 2956 34-B-2 in., Otherwise Same as No. 2953 34..... 3.60 Weight Per Dozen 3 Pounds. One Dozen in a Box.



Per Dozen

No. 2986 4 -1 5 in., Brass
Plated Wrought Steel Case,
Brass Plated Malleable Iron
Self-Locking Spring Shackle, 5 Changes, 2 Nickel
Plated Steel Keys......\$2.46
Weight Per Dozen 1 5 Pounds.
One Dozen in a Box.

Cuts Half Size.





No. 2988 34 - 1% in. Brass Plated Wrought Steel Case. Brass Plated Malleable Iron Self-locking Spring Shackle, 5 Changes, 2 Nickel Plated Weight Per Dozen 15 Pounds.

One Dozen in a Box.





Per Dozen No. 2990¼— 1x1 in., Black Japanned Wrought Steel Case, Brass

Plated Wrought Steel Self-Locking Spring Shackle, 3 Secure Levers, 12 Changes, 2 Nickel Plated Steel Keys. . \$5.80

No. 02990-All Brass, Otherwise Same as No. 299014 . . 7.36 Weight Per Dozen 1 Pound.

With Chain No. 2990 14 C-With 9 in. Brass Chain, Otherwise Same as No. 2990¼ Described

No. 02990-C-With 9 in. Brass Chain, Otherwise Same as No. 02990 Described Above. 9.42 Weight Per Dozen 1% Pounds. One Dozen in a Box.





Each

No. 853.

No. 823-14 in., Wheel Finish Cast Bronze Case and Selflocking Spring Shackle, 3 Lever Tumblers, 48 Changes, 2 Fluted Nickel Bronze Keys ........\$2.26 Weight Per Box % Pound. No. 833—1½ in., Otherwise Same as No. 823...... 2.54 Weight Per Box 1% Pounds.

No. 843-1% in., 4 Lever Tum-blers, 72 Changes, Other-

wise Same as No. \$23.... 2.80
Weight Per Box 2 Pounds.
No. 853—2 in., 4 Lever Tumblers, 144 Changes, Otherwise Same as No. \$23.... 3.12
Weight Per Box 3½ Pounds.

Weight Per Box 5 1/2 Pounds. Five in a Box.

## PADLOCKS

Cuts Half Size.





No. 833 1/2.

Each

No. 823 1/2 -- 1 1/4 in., Wheel Finish Cast Bronze Case and Self-locking Shackle, 3 Lever Tumblers, Changes, 2 Fluted Nickel Bronze Keys, with 9 in. Nickel Plated Brass Chain. \$2.46 Weight Per Box, 11/2 Pounds.

No. 833 1/2 -- 1 1/2 in., with 9 in. Tinned Iron Chain, Otherwise Same as No. 823 1/2 . . . 2.74 Weight Per Box 2 Pounds.

No. 843½-1¾ in., 4 Lever Tumblers, 72 Changes, Otherwise Same as No. 83316 . . . . . . . . . . . . . . . . 3 . 04 Weight Per Box 21/2 Pounds.

No. 853½-2 in., 4 Lever Tum-blers, 144 Changes, Otherwise Same as No. 833 1/2 . . . 3.36 Weight Per Box 3 % Pounds. Five in a Box.



No. 805F.

Each No. 803F-11/2 in, Bower-Barffed Cast Iron Case, Buffed Bronze Self-locking Shac-kle, 4 Pin Tumblers, 144 

Weight Per Box 3 Pounds. Five in a Box.



Each No. 8454-2 in., Bower-Barffed Steel Case and Self-locking Spring Shackle, 4 Lever Tumblers, 144 Changes, 2 Nickel Plated Steel Keys. . \$2.62 Weight Per Box 2 % Pounds. Five in a Box.

# PADLOCKS

Cuts Half Size.



Each No. 815-1 in., Wheel Finish Cast Bronze Case and Selflocking Spring Shackle, 3 Lever Tumblers, 48 Changes. 2 Fluted Nickel Bronze Keys ......\$2.10 Weight Per Box 3/4 Pound. Five in a Box.





Each No. 8414-1 in., Bower-Barffed Steel Case and Self-locking Spring Shackle, 3 Lever Tumblers, 48 Changes, 2 Nickel Plated Keys.....\$1.80 Weight Per Box % Pound. Five in a Box.



Each No. 326-24 in., Cast Iron Case, Galvanized Steel Discs, Galvanized Steel Selflocking Spring Shackle, Warded, 6 Changes, 2 Nickel Plated Steel Keys. . \$0.80 Weight Per Box 1% Pounds. Five in a Box.





No. 324-1% in., Bower-Barffed Annealed Iron Case, Copper Plated Steel Discs, Copper Plated Steel Self-locking Spring Shackle, Warded, 6 Weight Per Box 1 1/4 Pounds.

Five in a Box.

Each

Cuts Half Size.



Each

Weight Per Box 3 Pounds.

Five in a Box.



Each

No. 225—2 in., Bower-Barffed Cast Iron Case, Brass Plated Wrought Steel Panels, Brass Plated Steel Self-Locking Spring Shackle, Warded, 6 Changes, 2 Nickel Plated Steel Keys......\$0.66 Weight Per Box 2 % Pounds.

Five in a Box.



Per Dozen

No. 1—2¼ in., Gun Metal Case, Brass Self-Locking Spring Shackle, Brass Interior Parts, Gun Metal Springs, Secure Lever Mechanism, Changes Unlimited, 2 Nickel Plated Steel Keys. \$20.32 Weight Per Dozen 5¾ Pounds.

## With Chain

One-half Dozen in a Box.

## PADLOCKS

Cuts Half Size.



Per Dozen

No. 7121—2 1/8 in., Ebony Black Carbon Steel Case, Hardened Steel Self-Locking Spring Shackle, Reinforced Armor Plates, 6 Secure Levers, Changes Unlimited, 2 Nickel Plated Steel Keys. 836.00 Weight Per Dozen 10 Pounds. One-half Dozen in a Box.



Per Dozen

No. 999—1% in., Cast Bronze Case and Self-Locking Spring Shackle, 6 Changes, 2 Nickel Plated Steel Keys. \$26.16

This Padlock is the heaviest of its size in the Miller line, and built to stand up under continuous service.

Weight Per Dozen 6% Pounds. One-half Dozen in a Box.



Per Dozen

Shackles are bolted at nose as well as the heel which gives additional strength and security.

Weight Per Dozen 3 1/4 Pounds. One-half Dozen in a Box.

# PADLOCKS

Cuts Half Size.



Per Dozen

No. 521—2 in., Black Enameled Steel Case, Nickel Plated Malleable Iron-Self-Locking Spring Shackle, Shackle Bolted at Both Ends, 12 Changes, 2 Nickeled Malleable Iron Barrel Keys....\$5.28 Weight Per Dozen 3 Pounds. One-half Dozen in a Box.



Per Dozen

Weight Per Dozen 2 % Pounds. One-half Dozen in a Box.



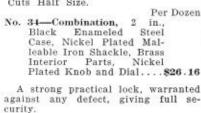
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No. 100B—1½ in., Black Enameled Steel Case, Nickel Plated Malleable Iron Self-Locking Spring Shackle, 2 Nickeled Steel Keys.....\$2.50

Weight Per Dozen 11 Pounds. One-half Dozen in a Box.

We are prepared to furnish Locks for any purpose. Information and price furnished on request.

Cuts Half Size.



against any defect, giving full security.

It may be opened in five seconds by aid of either sight, touch or sound. All combinations are recorded and if lost can be obtained from the factory.

Per Dozen

Weight Per Dozen 6 Pounds. One in a Box, with Directions.



No. 0-34 in., Polished Cast Bronze Case and Self-Locking Spring Shackle, 8 Changes, 2 Bronze Barrel Keys....85.35 Weight Per Dozen % Pound.

No. 70-1% in., 12 Changes, Otherwise Same as No. Weight Per Dozen % Pound. 6.85

No. 71-11/8 in., 12 Changes, Otherwise Same as No. 7.50

Weight Per Dozen 11/4 Pounds. One Dozen in a Box.



Per Dozen No. 72-11/2 in., Polished Cast Bronze Case and Self-Locking Spring Shackle, 1 Tumbler, 48 Changes, 2 Bronze Barrel Keys......\$11.00 Weight Per Dozen 2 Pounds.

No. 73-1% in., 96 Changes, Otherwise Same as No. 72...... 12.50 Weight Per Dozen 3 1/4 Pounds.

No. 72.

## With Chain

No. 72A-11/2 in., Polished Cast Bronze Case and Self-Locking Spring Shackle, 1 Tumbler, 48 Changes, 2 Bronze Barrel Keys, with 9 in. ......\$12.75 Chain

Weight Per Dozen 2½ Pounds. Nos. 72 and 72A, One Dozen; No. 73, One-half Dozen in a Box



Per Dozen

No. 74-2 in., Polished Cast Bronze Case and Self-Locking Spring Shackle, Plain Cover on Key Hole, 1 Tumbler, 96 Changes, 2 Bronze Barrel Weight Per Dozen 41/4 Pounds.

## With Chain

No. 75-With 9 in. Japanned Chain, Otherwise Same as No. 74...... 16.15 Weight Per Dozen 5 % Pounds. One-half Dozen in a Box.

## PADLOCKS

Cuts Half Size.



Per Dozen No. 79-2 1/4 in., Polished Cast Bronze Case and Self-Locking Spring Shackle, Plain Cover Over Key Hole, One Tumbler, 240 Changes, 2 Bronze Barrel Keys, with 9 in. Japanned Chain. .....\$17.40

> Weight Per Dozen 8 Pounds.

Without Chain

Per Dozen

No. 78-21/4 in., Polished Cast Bronze Case and Self-Locking Spring Shackle, Plain Cover Over Key Hole, 1 Tumbler, 240 Changes, 2 Bronze Barrel Keys ......\$15.40

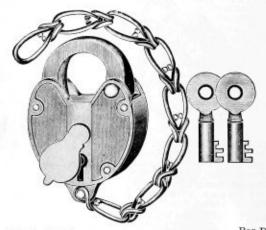
> Weight Per Dozen 6% Pounds. One-half Dozen in a Box.



Per Dozen No. 85 — 2½ in., Polished Cast Bronze Case and Self-Locking Spring Shackle, Spring Cover Over Key hole, One Tumbler, 240 Changes, 2 Bronze Barrel Keys, with 9 in. Japanned Chain ....\$21.00

Weight Per Dozen 1014 Pounds.

One-half Dozen in a Box.



Per Dozen No. 960-C—2½ in., Red Enameled Malleable Iron Case, Polished Malleable Iron Self-Locking Spring Shackle, Bronze Drop, 4 Secure Levers, 

> Weight Per Dozen 10 % Pounds. One-half Dozen in a Box.

# PADLOCK ASSORTMENTS

CORBIN

## Contents of Assortment One-quarter Dozen Each

No. 981 ¼—2 in., Steel Black Japanned, Nickel Plated Shackle.

No. 2822 34 -D — 2 in., Steel, Brass Plated, Red Center.

No. 291834—2 in., Steel, Black Japanned, Nickel Plated Shackle.

No. 2953 4-A-1 in., Steel, Black Japanned, Gilt Center

No. 2955 ¼-A—1¾ in., Steel, Black Japanned, Gilt Center No. 09827—1¼ in., Cast Brass, Polished.

No. 09828—1 % in., Cast Brass, Polished.

No. 9831 34 — 1 34 in., Steel, Brass Plated.

No. 9832 14 -E — 2 in., Steel, Green Enameled, Gilt Center.

No. 09835—2 1/2 in., Cast Brass, Polished.

No. 09838—1 % in., Cast Brass, Polished.

No. 9925A-2 in., Steel, Brass Plated.

#### One Each

No. 02829—2 1/8 in., Cast Brass, Polished,

No. 09870—1 % in., Cast Brass. No. 09899—2 in., Cast Bronze,

Per Assortment

No. 5002 Assortment—Consists of 3 1/4 Dozen Assorted Padlocks, One of Each Style Mounted on a 20 1/2 x 9 1/4 in. Walnut Finished Steel Display Panel, with Hinges to Swing Right and Left, or can be Suspended by the Chain.....\$24.36

Weight Per Assortment  $13\,\%$  Pounds.

One Assortment in a Box.



# Contents of Assortment One-sixth Dozen Each

No. 02829—2 ½ in., Polished Cast Brass Case, Nickel Plated Steel Shackle.

No. 09827—114 in., Polished Cast Brass Case, Nickel Plated Steel Shackle.

No. 09827-H—1 ¼ in., Polished Cast Brass Case, Nickel Plated Steel Shackle.

No. 09828—1 % in., Polished Cast Brass Case, Nickel Plated Steel Shackle.

No. 09828-H-15 in., Polished Cast Brass Case, Nickel Plated Steel Shackle.

No. 09830—1 5/8 in., Polished Cast Brass Case, Nickel Plated Steel Shackle.

No. 09838—1¾ in., Polished Cast Brass Case, Nickel Plated Steel Shackle.

Per Assortment

Weight Per Assortment 8 Pounds. One Assortment in a Box.

# PADLOCK ASSORTMENTS

CORBIN

Contents of Assortment One-quarter Dozen Each

No. 9814—2 in., Steel, Black Japanned, Nickel Plated Shackle.

No. 2806 ¼ —2 in., Steel, Black Japanned, Brass Plated Shackle.

No. 2809 ¾ —1 % in., Steel, Brass Plated.

No. 2822 %-D-2 in., Steel, Brass Plated, Red Center,

No. 291814—2 in., Steel, Black Japanned, Nickel Plated Shackle.

No. 2953 ¼ -A-1 ½ in., Steel, Black Japanned, Gilt Center.

No. 2956 ¼ -A — 2 in. Steel, Black Japanned, Gilt Center.

No. 2988 4 — 1 % in., Steel, Black Japanned, Nickel Plated Shackle.

No. 2993¾ — 1% in., Steel, Brass Plated.

No. 9831 ¼-B-1 ¼ in., Steel, Brass Plated, Black Center.

No. 9832 ¼ -E — 2 in., Steel, Green Enameled, Gilt Center.

No. 9925-A—2 in., Steel, Brass Plated.

One Each

No. 02829—2 1/8 in., Cast Brass, Polished. No. 09827—1 1/4 in., Cast Brass, Polished.

No. 09828-1% in., Cast Brass, Polished.

Per Assortment

No. 5000 Assortment—Consists of 3½ Dozen Assorted Padlocks, One of Each Style Mounted on a 20½x9¼ in. Walnut Finished Steel Display Panel, with Hinges to Swing Right and Left, or can be Suspended by the Chain......\$16.00 Weight Per Assortment 12½ Pounds.

One Assortment in a Box.

# DOG COLLAR PADLOCKS

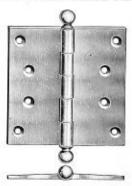


Per Assortment

One Assortment in a Box.

## LOOSE PIN BUTTS

CORBIN, STEEL BUSHED NON-RISING STEEL PIN



No. 61—Cast Bronze Steel Bushed, Ball Tips.

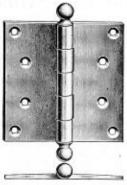
Not made to Templet. Can be furnished with Brass Pins or with Button Head Tips when so ordered.

#### Per Pair

Size, Inches	Weight Per Dozen Pairs, Lbs.	Polished Brass or Bronze, Old Copper, Dull Brass	Sand Finishes and Nickel Plated
3 x3	11 1/2	\$3.55	\$3.85
31/2 x31/2	16 1/2	4.00	4.35
4 x4	21	4 65	5.00
4 1/2 x 4 1/2	30	6.00	6.45
5 x5	39	7.85	7.80
6 x6	64	14.45	15.00

One Pair in a Box, with Screws.

## CORBIN, STEEL BUSHED NON-RISING STEEL PIN



No. 611/2-Heavy Cast Bronze

Steel Bushed, Ball Tips, Self-Lubricating.

Not made to Templet, can be furnished with Brass Pins
or with Button Tips when so ordered.

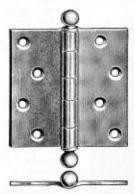
## Per Pair

Size, Inches	Weight Per Dozen Pairs, Lbs.	Polished Brass or Bronze, Old Copper, Dull Brass	Sand Finishes and Nickel Plated
3 x3	131/2	\$4.45	\$4.80
3 1/2 x3 1/2 4 x4	15 % 25	4.85 6.20	5.35 6.65
4 1/2 x 4 1/2	34	8.45	8.95
5 x5	4.2	10.20	10.65
6 x6	6.8	16.65	17.35

One Pair in a Box, with Screws.

## LOOSE PIN BUTTS

CORBIN, STEEL BUSHED NON-RISING STEEL PIN



No. 275-Heavy Wrought Bronze

Steel Bushed, Ball Tips,

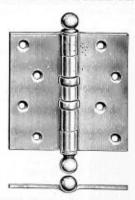
Made to Templet or furnished with Brass Pin or with Button Tips when so ordered.

Per Pair

Size, Inches	Weight Per Dozen Pairs, Lbs.	B Pol- ished Bronze, EA Dull Brass	SKA Sanded Brass
3 x3	12	83.25	\$3.55
314x314	171/4	3.55	3.85
4 x4	22 1/2	4.20	4.65
41/2 x 41/2	30%	5.30	5.75
5 x5	39	6.60	6.90
6 x6	60	12.90	13.35

One Pair in a Box, with Screws,

## CORBIN, BALL BEARING NON-RISING STEEL PIN



No. 280—Heavy Wrought Bronze

Steel Bushed, Ball Tips.

Made to Templet or furnished with Brass Pin or with Button Tips when so ordered.

Per Pair

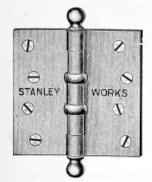
Size, Inches	Weight Per Dozen Pairs, Lbs.	B Pol- ished Bronze, EA Dull Brass	SKA Sanded Brass
3 x3	12	\$3.90	\$4.20
3 ½ x3 ½	17 1/4	4.20	
4 x4 4 1/2 x4 1/2	24 31 1/2	4.85 6.00	4.50 5.30 6.45
5 x5	39 %	7.25	7.55
6 x6	60	13.55	

One Pair in a Box, with Screws.

# LOOSE PIN BUTTS

STANLEY, BALL BEARING

NON-DETACHABLE WASHERS, BALL TIPS



## No. BB241 — Wrought Steel, Planished and Plated

Made of Cold Rolled Steel, Weather Protected Ball Bearing Washers. The Ball Tip and Pin made in one piece, Nonrising, Self-lubricating Pin, prevents wear on inside of knuckles.

#### Per Pair

Size, Inches	No. of Screw Holes	Size of Screws	Weight Per Pair, Lbs.	A D2 F	SF4 Sanded Finish	N Nickel Plated
21/2 x21/2	6	7/8 x 8	910	\$1.45	\$1.53	\$1.58
3 x3	6	1 x 8	9/10	1.49	1.57	1.62
31/2 x3 1/2	6	1 x 9	11/3	1.50	1.60	1.68
4 x4	8	1 x10	1 %	1.70	1.80	1.88
4 1/2 x 4 1/2	8	1 1/4 x10	2 1/4	2.15	2.30	2.40
5 x5	10	1 1/4 x12	3	3.20	3.35	3.45

One Pair in a Box, with Screws.

#### STANLEY HALF SURFACE

# BEVELED EDGE SURFACE LEAF, BALL TIPS



## No. 165—Wrought Steel, Planished and Plated

The Slot in the lower Ball Tip allows the tip to be unscrewed for the purpose of reversing the butt.

These butts effect economy in the cost of hanging doors. The surface leaf is applied to the door without mortising.

Per Pair

Size, Length, Inches	No. of Screw Holes	Size of Screws	Weight Per Pair, Lbs.	$_{\mathbf{F}}^{\mathbf{A}}$	SF4 Sanded Finish
21/2	4	%x 5	1/2	\$0.85	\$0.93
3 3 14	6	1 x 8 1 x 8	1 1/2	1.05	1.03
4	8	1 x10	2 2	1.35	1.45
436	8	1 x10	2 1/2	1.75	1.90

2½ in., Three Pairs; Larger Sizes, One Pair in a Box, with Screws.

Note-Also Packed and Priced Three Pair in a Box constituting a set.

# LOOSE PIN BUTTS

STANLEY, PLAIN BEARING NON-RISING STEEL PIN, BALL TIPS



## No. 241½ — Wrought Steel, Polished and Plated

These Butts are made of Cold Rolled Steel, heavily plated and finely finished. Five Knuckles in Joint, Ball Tip and Pin, made from one piece of Steel, Polished Barrel, True to Alignment.

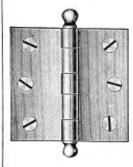
Per Pair

Size, Inches	No. of Screw Holes	Size of Screws	Weight Per Pair, Lbs.	A D2 F C	SF4 Sanded Finish	N Nickel Plated
21/2 x21/4	6	7/8 x 8	1/2	\$1.40	\$1.48	\$1.53
3 x3	6	1 x 8	%10	1.45	1.53	1.58
3 1/2 x3 1/2	6	1 x 9	1 1/3	1.60	1.70	1.78
4 x4	8	1 x10	1 %	1.85	1.95	2.03
4 36 x4 36	8	1 1/4 x 10	2 1/4	2.30	2.45	2.55
5 x5	10	1 1/4 x 12	3	3.40	3.55	3.65
6 x6	10	1 1/2 x14	4 1/4	5.40	5.60	

Any of the above butts can be furnished sheradized before plating, this finish being recommended for hinges exposed to weather or damp atmosphere. In ordering, prefix the letter Z to above numbers which designate this finish.

2 1/2 x2 1/2 in., Three Pairs; Others, One Pair in a Box, with Screws.

# STANLEY PLAIN BEARING NON-RISING STEEL PIN, BALL TIPS



## No. 241 — Wrought Steel, Planished and Plated

Made of Cold Rolled Steel, Planished and Plated, 2½ x2½ in. and larger have five Knuckles in Joint, Ball Tip and Pin made from one piece of Steel, Pin closely fitted in Knuckle.

Per Pair

Size, Inches	No. of Screw Holes	Size of Screws	Weight Per Pair, Lbs.	A D2 F C	SF4 Sanded Finish	N Nickel Plated	G Bower- Barff Brass Screws
2 x2	4	34 x 7	1/3	\$0.65	.78	\$0.78	\$1.15
2½x2½	6	78 x 7	1/2	.70		.83	1.20
3 x3	6	1 x 8	9/10	.74		.87	1.24
3 ½ x3 ½	6	1 x 9	1 1/3	.75	1.05	.93	1.63
4 x4	8	1 x10	1 3/4	.95		1.13	1.83
4 ½ x4 ½	8	1 4 x10	2 1/4	1.40		1.65	3.28
5 x5	10	1 1/4 x12	3 4 1/2	2.45	2.60	2.70	4.33
6 x6	10	1 1/4 x14		4.30	4.50	4.63	9.95

2 ½ in. and Smaller, Three Pairs; Larger Sizes, One Pair in a Box, with Screws.

## LOOSE PIN BUTTS

#### STANLEY LIGHT, BALL TIPS



#### No. 289—Wrought Steel Planished and Plated

Made of highest grade cold rolled steel, used on the lighter weight doors such as china closets, cabinets and book cases. Ball Tip and Pin made from one piece of steel.

#### Per Dozen Pairs

Size Inches	No. of Screw Holes	Size of Screws	Weight Dozen Pairs, Lbs	A D2 F		N Nickel Plated	G Bower Barff Brass Screws
2 x2	4	% x7	3	\$5.50	86.15	86.75	\$10.00
21/2 x2	6	% x7	3 1/2				10.60
21/2 x21/2	6	34 x7	4	6.10		7.35	
3 x3	6	34 x8	6 %	7.75	8.40	9.00	15.60

 $2\frac{1}{2}x2\frac{1}{2}$  in. and Larger Have Five Knuckles; Smaller Sizes Three.

One-half Dozen Pairs in a Box, with Screws.

## No. 189N-Wrought Brass, Nickel Plated

Size, Inches	2x2	2 1/2 x2	2 1/2 x2 1/2
Per Dozen Pairs	\$9.60	11.60	14.00

2 1/2 x2 in, and Larger Have Five Knuckles; Smaller Sizes Three.

One-half Dozen Pairs in a Box, with Screws.

## STANLEY LIGHT NARROW, BALL TIPS



#### No. 295—Wrought Steel, Planished and Plated

Made of high grade cold rolled steel, used on light doors such as china closets, cabinets and book cases.

2 1/2 in, and Larger Have Five Knuckles; Smaller Sizes Three.

#### Per Dozen Pairs

Size Length Inches		Size of Screws	Weight Dozen Pairs, Lbs.	A D2 F	SF4 Sand Finish	N Nickel Plated
2 2 1/2	4	% x6	2 %	\$5.15	\$5.80	\$6.40
3	6	% x6 % x7	3 4 %	5.75 7.10	7.75	7.00 8.40

One-half Dozen Pairs in a Box, with Screws.

## CORBIN BRASS PIN, BALL TIPS

Per Dozen Pairs

No. 102 34 —Cast Bronze, Polished

Size Inches	Weight Dozen Pairs, Lbs.	Pol- ished Brass or Bronze Old Copper Dull Brass	Sand finishes and Nickel Plated	F Rust- less Iron
2 x11/2	3	\$1.60	\$1.75	\$1.15
2 x2	3 %	1.85	2.00	1.25
2 1/2 x2	4 %	2.20	2.40	1.45
21/2 x21/2	6 1/2	2.40	2.60	1.60
3 x21/2	8 %	3.00	3.35	2.00
3 x3	10%	3.35	3.65	2.35

3x3 in., One-half Dozen Pairs; Smaller Sizes, One Dozen Pairs in a Box, with Screws.

## LOOSE PIN BUTTS

## CORBIN CABINET, BALL TIPS

No. 039 ½—Wrought Bronze, Steel Pins
Per Dozen Pairs

Size Weight Per Dozen Pairs, Lbs.

1½ x1¼ 1 \$2.40

1 %

2 34

4 1/4

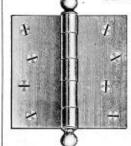
One Dozen Pairs in a Box, with Screws.

x1 36

21/2 x1 1/4

3 x2

## STANLEY BALL TIPS



# No. 823—Wrought Steel, Bright

3.60

4.50

7.00

Made of high grade cold rolled steel. The Pin and Tip are made of one piece of steel.

Sizes 3½x3½ and Larger Have Five Knuckles in the Joint; Smaller Sizes Have Three.

#### Per Dozen Pairs

Size. Inches	No. of Screw Holes	Size of Screws	Weight Per Dozen Pairs, Lbs.	Bright Without Screws
2 x2	4	% x 7	3 34	\$ 4.15
21/2 x2	6	%x 7	4 %	4.55
236 x236	6	%x 8	6	4.65
3 x2 1/2	6	1 x 8	7 1/6	4.90
3 x3	6	1 x 8	8 %	5.00
3 1/2 x3	6	1 x 9	10 %	5.25
3 16 x3 14	6	1 x 9	14 %	5.50
4 x4	8	1 x10	19 %	7.15
4 1/2 x 4 1/2	8	1 1/4 x10	25 1/6	9.75
5 x5	10	1 1/4 x12	32 %	13.10
6 x6	10	1 1/2 x 1 2	50%	21.50

4x4 and Smaller One-half Dozen Pairs; Larger Sizes Onequarter Dozen Pairs in a Box, without Screws.

#### STANLEY BALL TIPS



#### No. 731J-Wrought Steel, Japanned

Made of high grade cold rolled steel. The Pin and Tip are made of one piece of steel.

Sizes 3½x3½ and Larger Have Five Knuckles in the Joint; Smaller Sizes Have Three.

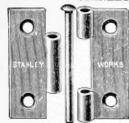
## Per Dozen Pairs

Size, Inches	No. of Screw Holes	Size of Screws	Weight Per Dozen Pairs, Lbs.	Japanned Without Screws
2 x2 2 ½ x2 ½	4 6	% x 7	3 %	\$ 4.60
3 x2 1/2	6	78 X 8	6	5.00
3 x3	6	1 x 8	7 1/6 8 3/6	5.25 5.50
31/2 x31/2	6	1 x 9	14 %	6.00
4 x4 4½ x4½	8	1 x10	19 %	7.50
5 x5	10	1 1/4 x10 1 1/4 x12	2 5 1/5 3 2 3/5	10.00
6 x6	10	1 1/4 x14	50 %	13.75 23.65

4x4 and Smaller One-half Dozen Pairs; Larger Sizes Onequarter Dozen Pairs in a Box, without Screws.

# LOOSE PIN BUTTS

STANLEY LIGHT NARROW



# No. 840-Wrought Steel, Bright

These Butts may be reversed by removing the oval head loose pin.

2½ in. and larger sizes have Five Knuckles, smaller sizes Three.

#### Per Dozen Pairs.

Size Length, Inches	Width Open, Inches	No. of Screw Holes	Size of Screws No.	Weight Per Dozen Pairs, Lbs.	Bright Without Screws
1	1	4	3	1/2	\$0.85
134	1 16	4	4	%	1.10
11/2	1 70	4	5	10	1.35
1 34	1 7	4	5	1 1/6	1.65
2	1 %	4	6	1 1/6	1.80
234	1 11	6	6	2	2.00
21/2	1 11	6	6	2 1/3	2.05
3	2	6	7	4	2.85

One Dozen Pairs in a Box, without Screws.

#### STANLEY LIGHT NARROW



#### No. 286—Wrought Steel, Planished and Plated

These Butts may be reversed by removing the oval head loose pin.

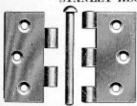
2½ in. and larger sizes have Five Knuckles, smaller sizes Three.

#### Per Dozen Pairs.

Size Length, In.	Width Open, In.	No. Screw Holes	Size of Screws, No.	Weight Dozen Pairs, Lbs.	A D2 F	SF4 Sand Finish	H Dead Black
1 1/2	1 %	4	5	1	\$3.50	\$4.80	85 05
2 2 1/4	1 16 1 11	6	6	2 1/2	4.35	4.90	5.15
21/2	1 11 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2	6	6	27/10 4	5.95	5.60 6.45	5.85 6.70

One Dozen Pairs in a Box, with Screws.

# STANLEY REGULAR REVERSIBLE



#### No. 1334R—Wrought Steel, Galvanized

These Butts are swaged and have oval head loose pins.

2½x2 in. and larger have Five Knuckles, smaller sizes Three.

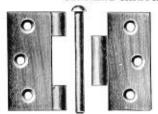
#### Per Dozen Pairs.

Size Inches	No. of Screw Holes	Size of Screws	Weight Per Dozen Pairs, Lbs.	R Galvanized With Screws
2 x2	4	%x 7	3	\$ 6.70
216 x216	6	76 x 8	5	7.55
3 x3	6	1 x 9	7 1/3	9.20
3 1/2 x 3 1/2	6	1 x 9	111/6	13.05
4 x4	8	1 x10	15	17.40
4 1/2 x 4 1/2	8	1 1/4 x 1 0	2.0	21.05
5 x5	10	1 1/4 x12	22	32.00
6 x6	10	1 1/2 x 1 4	40	75.00

4x4 in. and Smaller, One-half Dozen Pairs; 4½x4½ in. and 5x5 in., One-quarter Dozen; 6x6 in., One-twelfth Dozen Pairs in a Box, with Screws.

# LOOSE PIN BUTTS

STANLEY REGULAR REVERSIBLE



#### No. 804—Wrought Steel, Bright

These Butts are swaged and have oval head loose pins.

2 ½ x2 in. and larger have Five Knuckles, smaller sizes Three.

#### Per Dozen Pairs.

Size Inches	No. of Screw Holes	Size of Screws	Weight Dozen Pairs, Lbs,	Dozen Pair in Case	Average Weight Case Lbs.	Bright Without Screws
2 x2	4	% x 7	3	25	76	\$ 3.45
21/2 x2	6	76 x 8	4	25	105	3.85
21/2 x2 1/2	6	% x 8	5	25	121	4.00
3 x234	6	1 x 9	6 1/5	15	93	4.25
3 x3	6	1 x 9	7 3/4	15	110	4.30
3 16 x3	6	1 x 9	9 1/6	1.5	147	5.45
3 14 x3 14	6	1 x 9	111/6	15	169	5.75
4 x4	8	1 x10	15	10	148	7.45
4 16 x4 1a	8	1 1/4 x 10	20	5	102	10.15
5 x5	10	1 1/4 x 1 2	22	5	110	13.60
6 x6	10	1 1/2 x 1 4	40	3	121	22.85

3x3 in. and Smaller, One Dozen Pairs; 3½x3 to 4x4 in., One-half Dozen Pairs; 4½x4½ and 5x5 in.. Onequarter Dozen Pairs; 6x6 in., One-twelfth Dozen Pairs in a Box, without Screws.

# BROAD OR TRANSOM BUTTS



#### STANLEY, FAST JOINT

#### No. 808-Wrought Steel, Bright

The ends of pins are spun, thus making fast joints.

First dimension always indicates length of joint.

#### Per Dozen Pairs.

Size Inches	No. of Screw Holes	Size of Screws	Weight Per Dozen Pairs, Lbs.	Bright Without Screws
2 x2	4	3/4 x 7	3	\$ 2.85
236 x236	6	7/8 X 8	5	3.45
3 x3	6	1 x 9	7.36	3.70
3 16 x3 16	6	1 x 9	11	5.60
4 x4	8	1 x10	15	7.00
4 16 x 4 16	8	1 1/4 x 10	2.0	9.60
5 x5	10	1 1/4 x12	2.2	12.15
6 x6	1.0	1 1/2 x 1 4	4.0	20.70

4x4 in. and Smaller, One Dozen Pairs; Larger Sizes Onequarter Dozen Pairs, Except 6x6 in. which is Packed One-twelfth Dozen Pairs in a Box, without Screws.

#### No. 291-Wrought Steel, Planished

Screw holes and size of screws used and construction same as No. 808 above.

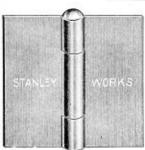
#### Per Dozen Pairs.

Size Inches	Weight Per Dozen Pairs, Lbs.	A F C	SF4 Sand Finish	G Bower Barff Brass Screws	No. 1319 Galvan- ized Brass Pins	No. 747J Japanned
2 x2	3.68	\$ 5.85		\$12.10		\$ 4.40
21/2 x2 1/2	6.04	6.25	7.20	12.45	6.90	4.95
3 x3	8.87	6.90	7.85	13.10	8.45	5.45
3 16 x3 16	13.1	7.80	9.00	18.70	11.90	6.75
4 x4	17.6	10.40	11.60	21.30	15.70	8.80
4 16 x 4 16	24.2				19.35	12.05
5 x5	34.				29.20	20.10

4x4 in, and Smaller, One-half Dozen Pairs; Larger Sizes, One-quarter Dozen Pairs in a Box, with Screws.

# FAST JOINT BUTTS

#### EXTRA HEAVY



No. 850—Wrought Steel, Bright

Designed especially for Iron Shutters, Gates and Jail Work.

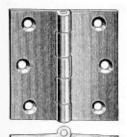
Holes may be drilled to meet the requirements on work of a special nature.

#### Per Dozen Pairs

Size, Inches	Weight Per Dozen Pair, Lbs.	Dozen Pairs in a Case	Average Weight Case, Lbs.	Bright Steel, No Screws
2 ½ x2 ½ 3 x3	7 1/6	10	78	\$ 5.60
3 x3 3 ½ x3 ½	10 %	10 10	108 160	7.45 11.20
4 x4	24	5	120	14.90
4 1/2 x4 1/2	31	5	155	18.60
5 x5 6 x6	36 55	5 3	180 165	28.00 38.50

One-half Dozen Pairs in a Box, without Screws.

# CORBIN, CAST BRASS



No. 100—Cast Brass, Unpolished, Brass Pin

Per Pair

Size, Inches	No. of Screw Holes	Size of Screws, Nos.	Weight Dozen Pairs, Lbs.	Natural
2 111/2	6	6	3	\$0.80
2 x2	6	6	3 1/8	, 95
216 x2	6	8	3 %	1.20
2 1/2 x2 1/2	6	8	6	1 35
3 x2	6	9	5 %	1.75
8 x2 1/2	6	9	7 1/6	1.85
3 x3	6	9	9 1/2	2.00
3 1/2 x3 1/2	8	9	151/4	2.55

2 ½ x2 ½ in. and Smaller, One Dozen Pairs; Larger Sizes One-half Dozen Pairs in a Box, without Screws.

# No. 101½—Cast Bronze, Polished, Brass Pin Per Pair

Size, Inches	No. of Screw Holes	Size of Screws, Nos.	Weight Dozen Pairs, Lbs.	B R EA A	SKA Sand Finish E Nickel
2 x1 1/2	6	6	3	\$1.35	\$1.45
2 x2	6	6	3 1/4	1.45	1.60
21/2 x2	6	8	3 %	1.85	2.05
2 16 x2 16	6	8	6	2.00	2.20
3 x2	6	9	5 %	2.65	2.95
3 x2 16	6	9	7 1/2	2 80	3.05
3 x3	6	9	9 1/4	2.95	3.20
3 16 x3 16	8	9	15 14	3.35	3.60

3x2½ in, and Smaller, One Dozen Pairs, Larger Sizes One-half Dozen Pairs in a Box, with Screws.

# NARROW BUTTS

#### STANLEY, TIGHT PIN



No. 800-Wrought Steel, Bright

2½ in, and Larger Have Five Knuckles; Smaller Sizes Three,

Per Dozen Pairs

Size Length, Inches	Width Open, Inches	No. of Screw Holes,	Size of Screws	Wt. Dozen Pair, Lbs.	Dozen Pair in Case	Wt. Case, Lbs.	Bright with- out Scr'ws
1	1 13	4	%x 5	34	100	62	\$0.65
134	1 %	4	%x 6	1	100	97	.80
1 36	1 70	4	% x 6	1 1/4	100	124	1.05
2	1 11	4	34 x 7	2	50	105	1.50
21/2	1 %	6	% x 7	3	50	155	1.75
8	2 1/8	6	1 x 8	4 1/2	2.5	111	2.50
3 16	2 1/2	6	1 x 9	7	25	175	4.00
4	2 7/8	8	1 x 9	10	15	143	5.25
4 16	3	8	1 1/4 x 10	12	10	120	7.25
5	3 16	8	1 14 x11	15	10	153	9.50
6	4	8	1 1/2 x12	23	5	117	15.00

3 in. and Smaller, One Dozen Pairs; 3 ½ to 4 ½ in., Onehalf Dozen Pairs; Larger Sizes One-quarter Dozen Pairs in a Box.

# STANLEY LIGHT, TIGHT PIN



No. 838-Wrought Steel, Bright

2½ in, and Larger Have Five Knuckles; Small Sizes Three.

Per Dozen Pairs

Size Length, Inches	Width Open, Inches	No. of Screw Holes,	Size of Screws	Wt. Dozen Pair, Lbs.	Dozen Pair in Case	Wt. Case, Lbs.	Bright with- out Ser'ws
1	1	4	⅓x3	1/2	200	96	\$0.65
134	1 1	4	% x4	3/5	100	64	. 80
1 1/2	1 7	4	% x5	18	100	92	1.00
1 34	1 70	4	%x5	1 1/6	100	123	1.40
2	1 %	4	% x6	1 %	5.0	90	1.50
214	1 11	- 6	% x6	2	50	101	1.70
2 1/2	1 11	6	% x6	2 1/3	5.0	119	1.70
234	1 %	6	% x7	3 1/4	50	163	2.20
3	2	6	% x7	4	25	98	2.50

One Dozen Pairs in a Box.

# No. 284-Wrought Steel, Planished

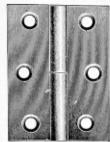
2½ in, and Larger Have Five Knuckles, Smaller Sizes Three.

#### Per Dozen Pairs

Size, Inches	Width Open, Inches	No. of Screw Holes	Size of Screws	Weight Dozen Pairs, Lbs.	A D2 F C	SF4 Sand Finish
1 1/4 2 2 1/4 2 1/2 3	$1\frac{7}{16}$ $1\frac{7}{16}$ $1\frac{1}{16}$ $1\frac{1}{16}$ $2$	4 4 6 6	% x5 % x6 % x6 % x6 % x7	1 2 2 ½ 2 ½ 2 ½ 4	\$3.35 3.80 4.20 4.55 5.35	\$3.95 4.40 4.80 5.15 5.95

One Dozen Pairs in a Box, with Screws

# LOOSE JOINT BUTTS



STANLEY NARROW

No. 802-Wrought Steel, Bright

#### Per Dozen Pairs

Size Length, Inches	Width Open, Inches	No. of Screw Holes	Size of Screws	Weight Dozen Pairs, Lbs.	Bright Without Screws
2 2½	1 †± 1 %	4 6	% x7 % x7	2 1/4 3	\$2.20 2.70
3	2 1/8	6	1 x8	4 1/2	3,55

One Dozen Pairs in a Box.

# PARLIAMENT BUTTS



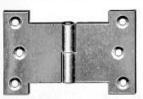
LOOSE JOINT

No. 830-Wrought Steel, Bright

Per Dozen Pairs

Size Width Open, In.	Length Joint, In.	Length Side, In.	Width Be- tween Flanges In.	No. of Screw Holes	Size Screws	Weight Dozen Pair, Lbs.	Bright Steel With- out Screws
21/2	1 1/2	2 ਜੋਵ	1 1/8	6	%x 8	3	\$ 3.20
3	1 1/2	2 18	1 11	6	76 x 8	4	3.60
3 16	1 3/4	2 70	2	6	7/8 X 9	5	3.90
4	1 34	2 70	2 7	6	1 x 9	6	4.30
4 1/2	1 3/4	2 76	2 %	6	1 x 9	73/10	5.30
5	1 %	2 70	3 %	6	1 x 9	8 1/5	6.00
5 1/2	1 %	2 70	3 7/8	6	1 14 x10	9 1/2	6.90
6	2	2 7/8	4 🖧	6	1 14 x10	121/10	7.40
8	2 1/2	3 %	5 %	6	1 1/4 x11	20 %	12.20

5 in. and Smaller, One Dozen Pairs, 51/2 and 6 in., One-half Dozen Pairs; 8 in. One-quarter Dozen Pairs in a Pox.



No. 832-Wrought Steel, Bright

Per Dozen Pairs

Size Width Open, In.	Length Joint, In.	Length Side, In.	Width Between Flanges, In.	No. of Screw Holes	Size Screws	Steel Without Screws
21/2	1	111	1 1/2	6	% x6	\$2.50

One Dozen Pairs in a Box.

## No. Z832-Wrought Steel, Sherardized Per Dozen Pairs

Size Width Open. Inches	Length Joint, Inches	Length Side, Inches	Width Between Flanges, Inches	No. of Screw Holes	Size ScreWs	Sher- adized with Screws
21/2	1	111	1 1/2	- 6	% x6	84.00

One Dozen Pairs in a Box, with Screws.

# WROUGHT BRASS BUTTS

NARROW

Wrought Brass, Steel Pin

Per Dozen Pairs



Size Length, In.	Width Open, In.	No. of Screw Holes	Screw Nos.	Weight Per Box, Lbs.	Natural Bright Brass
36	1/2	4	0	2	80.24
34	11	4	2	11/4	.28
1	3/4	4	2	1 %	.32
1 34	65	4	3	2 1/2	.46
1 1/2	76	4	4	3.3%	.52
134	1	6	5	4.56	. 68
2	1 1 2	6	5	5 %	.80
2 1/2	1 %	6	6	6	1.40
3	1 %	6	8	2 7/4	2.50

½ in. Twenty-four Dozen Pairs; ¾ to 2 in. Six Dozen Pairs; 21/2 in, Three Dozen Pairs; 3 in, One Dozen Pairs in a Box.

#### MIDDLE

Wrought Brass, Steel Pin

Per Dozen Pairs



	Size Length, In.	Width, Open, In.	No. of Screw Holes	Screw Nos.	Weight Fer Box, Lbs.	Natural Bright Brass
	36	19	4	U	2 1/8	\$0.26
	94	%	4	2	1 1/4	. 30
	1	7/6	4	3	1 %	.38
	1 14	7/8	4	4	2 %	.48
	1 36	1 22	4	4	3 34	. 60
	1 34	1 1/2	6	5	5	.76
	2	1 %	6	5	6 1/2	.92
	234	1 %	6	6	6	1.70
50	3	1 %	6	8	3	3.00

½ in., Twenty-four Dozen Pairs; ¾ to 2 in., Six Dozen Pairs; 21/4 and 21/2 in., Three Dozen Pairs; 3 in., One Dozen Pairs in a Box.

#### BROAD

Wrought Brass, Steel Pin

Per Dozen Pairs

0	0
0	0
0	c
	-

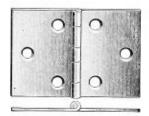
Natural Bright Brass	Weight Per Box, Lbs.	Screw Nos.	No. of Screw Holes	Width, Open, In	Size Length, In.
\$0.28	2 1/4	0	4	5/4	16
. 32	1 %	3	4	7/6	34
.40	2 1/4	3	4	1	1
.54	3 1/8	4	4	1 32	134
.68	4 3/8	4	4	1 1/4	1 36
.84	5 %	5	6	1 %	1 34
1.04	7 1/2	5	6	1 3%	2
2.00	6%	6	6	1 %	214
3.50	3 1/2	8	6	2	3

1/2 in., Twenty-four Dozen Pairs; 3/4 to 2 in., Six Dozen Pairs; 2/4 and 2/3/2 in., Three Dozen Pairs; 3 in., One Dozen Pairs in a Box.

ESTIMATES—We are prepared to furnish estimates for Hardware according to specifications and plans. Send us your specifications for estimates.

# WROUGHT BRASS BUTTS

DESK



Wrought Brass, Steel Pin

Per Dozen Pairs.

Size Length, Inches	Width Open, Inches	No. of Screw Holes	Screw Nos.	Weight Per Box, Lbs.	Natural Bright Brass
1	1 %	6	4	3 3/4	\$0.60
134	1 34	6	4	5 1/2	.84
1 1/2	2	6	5	8	1.20
1 34	2 %	6	6	13%	2.00
2	2 12	6	7	9 1/2	2.80

1 to 1% in., Six Dozen Pairs; 2 in., Three Dozen Pairs in a Box.

# BACK FLAP HINGES

BENT LOOSE PIN



No. 813-Wrought Steel, Bright

Per Dozen Pairs.

Size Length, Inches	Width Open, Inches	No. of Screw Holes	Size of Screws	Weight Dozen Pairs, Lbs.	Bright Steel
1 1/2	3 70	6	% x8	3	\$2.25
1 34	4	6	% x8	3 7/8	2.75
2	4 %	6	34 x8	5	3.25

2 in. One-quarter Dozen Pairs; Smaller Sizes, One Dozen Pairs in a Box,

#### PEW DOOR HINGES



No. 818-Wrought Steel, Bright

Per Dozen Pairs.

Size Length, Joint, Inches	Width Open, Inches	No. of Screw Holes	Size of Screws	Weight Dozen Pairs, Lbs.	Bright Steel
11/2	3 ½ 4 ¾	6	% x8 1 x9	2 % 5	\$2.60 3.75

1½ in., One Dozen Pairs; 2 in., One-half Dozen Pairs in a Box.

# INSIDE BLIND BUTTS



No. 843-Wrought Steel, Bright

Light with Beveled Edges, Ends of Pin Finished.

# Per Dozen Pairs.

Size Length, Inches	Width Open, Inches	No. of Screw Holes	Size of Screws	Weight Dozen Pairs, Lbs.	Bright Steel
11/6	1 %	6	% x5	%	\$1.65
1 1/4	1 %	6	% x5	1	1.75
1 1/2	2 1/8	6	% x5	1 %	2.50

One Dozen Pairs in a Box.

# TABLE HINGES

FLUSH RIVET



No. 810-Wrought Steel, Bright.

Per Dozen Pairs.

Size Length, Inches	Width Open, Inches	No. of Screw Holes	Size of Screws	Weignt Dozen Pairs, Lbs.	Bright Steel
136	2 3/4 2 7/8	6	% x7 % x7	1 %	\$1.55 1.80
1 34 1 34	3 1/8 3 1/8	6	% x8 1 x9	23/10 3	2.00 2.70
2	3 13	6	1 x9	4	3.35

One Dozen Pairs in a Box.

# CHEST HINGES



No. 820-Wrought Steel, Bright

Per Dozen Pairs.

Size Length, Joint, Inches	Offset, Inches	No. of Screw Holes	Size of Screws	Weight Dozen Pairs, Lbs.	Bright Steel
1 1/2	%	8	% x7	3	\$2.95
2	%		% x8	5 1/2	4.40

One Dozen Pairs in a Box.

# REFRIGERATOR HINGES



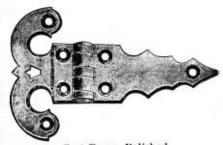
Wrought Steel, Planished No. 1420A-Planished Bronze

Size, Inches	1 34 x 1 34	2 1/2 x2 1/2
Weight Per Dozen Pairs, Lbs	1 %	3 %
Per Dozen Pairs	\$4.00	4.50
One-half Dozen Pairs in a	Box, with	Screws.

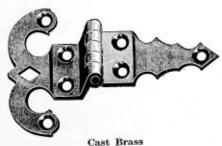


Cast Brass 1 % x3 ¼ in., 3% in. Offset.

	Per Dozen Pairs
No.	1182 —Polished Brass
No.	1182N—Nickel Plated, Polished 9.00
	Weight Per Dozen Pairs 4 % Pounds.
	One Dozen Pairs in a Box.



Cast Brass	Polished		
Nos	193	194	195
Length, Inches	5	5 %	6 1/4
Dozen Pairs in a Box	1	1	1
Weight Per Box, Lbs	4 3/4	6 34	8 7
Per Dozen Pairs	\$6.50	8.00	10.40
Nos	196	197	198
Length, Inches	7 1/2	8 1/2	1134
Dozen Pairs in a Box	1/2	1/2 7	1/2
Weight Per Box, Lbs	5 1/4		12 1/2
Per Dozen Pairs	\$13.40	16.60	27.00



Length 5 in., % in. Offset.

	Per Dozen Pairs
No. No.	1093 — Polished Brass

# REFRIGERATOR HINGES



#### Wrought Brass

1 1/2 x5 in.

Per Dozen Pairs

Weight Per Dozen Pairs 6 Pounds. One-half Dozen Pairs in a Box, with Screws.



# Wrought Brass

1%x4% in., % in. Offset. No. 1408—Polished Brass......\$14.65 Weight Per Dozen Pairs 6 Pounds. One-half Dozen Pairs in a Box, with Screws.



#### Wrought Brass

1 % x5 % in.

Per Dozen Pairs

Weight Per Dozen Pairs 6 1/4 Pounds. One-half Dozen Pairs in a Box, with Screws.



Wrought Brass

1 % x4 3 in.

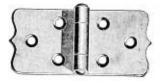
Per Dozen Pairs

Weight Per Dozen Pairs 6 Pounds. One-half Dozen Pairs in a Box, with Screws.

# WASH-TRAY HINGES



Style of 11/2 and 11/4 in.



Style of 2 in.

#### Wrought Steel

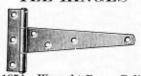
No. 1312-Galvanized Brass Pins Size, Inches..... 1 1/2 1 3/4 2 Width Open, In... 2% 3 1/8 4 1/4 Size Screw, Nos... 6 8 8 8 Wt. Doz. Prs., Lbs. 2 % 3 % 6 ½ Per Dozen Pairs... 86.65 7.95 9.50 One Dozen Pairs in a Box, with Screws.

#### STRAP HINGES

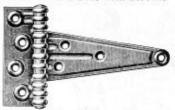


No. 1850-Wrought Brass, Polished L'th Ea. Leaf, In. 3 4 5 Width Strap at Joint, In . . . . 1 1/8 17-10 Screw Holes.... 6 Size Screw, Nos. 6 Wt. Dz. Prs., Lbs. 31/2 8 Per Dozen Pairs. \$17.35 23.05 30.75 One Pair in a Box, with Screws.

#### TEE HINGES



No. 1854-Wrought Brass, Polished Length Strap, In. 3 4 Width Strap at Joint, In ..... 1 % 2 % Length Joint, In. 2 % 6 Screw Holes.... 6 8 Size Screws, Nos. Wt. Dz. Prs., Lbs. 3 % 4 % Per Dozen Pairs, \$19.20 25.40 33.75 One Pair in a Box, with Screws.



No. 1437-Wrought Brass, Corrugated Length Strap, Inches..... 6 Width Strap at Joint, Inches. 2 1/4 Length Joint, Inches...... 4 1/2 11 Weight Dozen Pairs, Lbs.... One Pair in a Box, with Screws.

# ORNAMENTAL HINGES

LOTUS PATTERN, FULL SURFACE



Wrought Steel

Length Joint 11/2 in., Width Open 21/2 in. Per Dozen Pairs No. 1478-D2—Antique Copper. \$4.00 No. 1478-F —Dull Brass..... 4.00 Weight Per Dozen Pairs 2 Pounds. One Dozen Pairs in a Box, with Screws.

LOTUS PATTERN, HALF SURFACE



Wrought Steel, Loose Pin Length Joint 11/2 in., Width Open 1 % in. Per Dozen Pairs No. 1479-D2-Antique Copper. \$4.00 No. 1479-F — Dull Brass..... 4.00 Weight Per Dozen Pairs 1 1/4 Pounds. One Dozen Pairs in a Box, with Screws.

#### BUTTERFLY PATTERN



Wrought Steel

Length Joint 11/4 in., Width Open Per Dozen Pairs No. 1431-D2-Antique Copper., \$4.00 No. 1431-F -Dull Brass..... 4.00

Wrought Brass

Length Joint 11/4 in., Width Open 3 in. Per Dozen Pairs One Dozen Pairs in a Box, with Screws.

#### KITCHEN CABINET



Wrought Steel, Reversed Pad, with 36 in. Offset

Length Joint 1¼ in., Leaf 2% in. Wide, Pad ½ in. Wide. Per Dozen Pairs

No. 1497-C7—Brass Plated....\$3.50 No. 1497-N7—Nickel Plated... 3.50 Weight Per Dozen Pairs 1% Pounds. Open Stock.

# ORNAMENTAL HINGES

FLAP



Wrought Brass Length Joint 34 in., Width Open 2 1/4 in.

Per Dozen Pairs No. 0211514-Polished and Lac-

Polished ..... 1.60 Weight Per Dozen Pairs % Pound. Length Joint 1 in., Width Open 3 in.

Per Dozen Pairs No. 0211614 -- Polished and Lacquered .....\$1.75

No. 021161/2-Nickel Plated, Polished . . . . . . . . . . . . 2.25 Weight Per Dozen Pairs 1½ Pounds. Three Dozen Pairs in a Box,

#### ROX



Wrought Brass Length Joint 1/2 in., Width Open 1 1/4 in. Per Dozen Pairs 

Three Dozen Pairs in a Box.



Wrought Brass Length Joint % in., Width Open 1 in. Per Dozen Pairs Weight Per Dozen Pairs 18 Pound. Three Dozen Pairs in a Box.



Wrought Brass Length Joint % in., Width Open 1 1/2 in. Per Dozen Pairs No. 02111-Dipped and Lac-

Three Dozen Pairs in a Box.



Wrought Brass Length Joint % in., Width Open 1 % in.

Per Dozen Pairs No. 02108-Dipped and Lac-Three Dozen Pairs in a Box.



Wrought Brass Length Joint 15% in., Width Open 2 % in. Per Dozen Pairs No. 02112-Dipped and Lac-Three Dozen Pairs in a Box.

# ORNAMENTAL HINGES



#### Wrought Brass Size 1 1/4 x 1 1/4 in.

Per Dozen Pairs No. 02114—Dipped and Lacquered......\$1.15 Weight Per Dozen Pairs % Pound. Three Dozen Pairs in a Box.



#### Wrought Brass

Length 3 in., Width at Joint 1 in. Per Dozen Pairs No. 02113-Dipped and Lacquered . . . . . .........\$1.35 Weight Per Dozen Pairs 7 Pound. Three Dozen Pairs in a Box.



#### Wrought Brass

Length 31/4 in., Width at Joint 1/2 in. Per Dozen Pairs No. 02121-Dipped and Lacquered.......\$1.90 Weight Per Dozen Pairs % Pound. One and One-half Dozen Pairs in a Box.



# Wrought Brass

#### Polished and Lacquered.

Nos	0212014
Length, Inches 2 1/8	3 1/2
Width at Joint, Inches %	34
Weight Per Dozen Pairs, Lbs %	1
Per Dozen Pairs \$1.80	2.50

No. 0212214 has 3 screw holes in each leaf. One and One-half Dozen Pairs in a Box.



#### Wrought Brass

Length 2% in., Width at Joint % in. Per Dozen Pairs No. 02119-Dipped and Lacquered ......\$1.80 Weight Per Dozen Pairs % Pound. One and One-half Dozen Pairs in a Box.



#### Wrought Brass

Length 4 % in., Width at Joint 1 % in. Per Dozen Pairs No. 0215114 -- Polished and Lacquered . . . . . . . . . . . . \$1.50 Weight Per Dozen Pairs 21/2 Pounds. One Dozen Pairs in a Box.

# ORNAMENTAL HINGES



#### Wrought Brass

Length 4 % in., Width at Joint 1 1/2 in. Per Dozen Pairs Weight Per Dozen Pairs 1 % Pounds. One and One-half Dozen Pairs in a Box.



#### Wrought Brass

Length 71/2 in., Width at Joint 11/2 in. Per Dozen Pairs No. 0210214 -- Polished and Lacquered . . . . . . . . . . . \$5.00 Weight Per Dozen Pairs 21/4 Pounds One and One-half Dozen Pairs in a Box.

# SCREEN HINGES

DOUBLE ACTING



For Screens, Inches	34	1
Wt. Doz. Pairs, Lbs.	2 1/2	3
Per Dozen Pairs	\$11.20	12.00
Size, Inches		2x1 %

No. 105-Wrought Brass, Polished

Size. Inches 136 v116 136 v136

Wt. Dozen Pairs, Lbs..... Per Dozen Pairs..... \$13.60

#### Wrought Steel No. 875-C-Brass Plated

Length Joint, Inches..... 2 Width Closed, Inches..... 1 14 3 % Weight Per Dozen Pairs, Lbs.... Per Dozen Pairs...... \$5.10 7.50

One Dozen Pairs in a Box, with Screws.

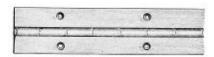
# TOILET HINGES

Wrought Brass

Length 3 in., Width at Joint  $1\frac{1}{2}$  in. Per Dozen Pairs No. 02123 — Dipped and Lacquered . . . . . . . . . \$2.00 Weight Dozen Pairs 1 % Pounds. One Dozen Pairs in a Box.



# CONTINUOUS OR PIANO HINGES



#### Wrought Brass

Width 17s in., Lengths up to 5 ft.

										P	er I	Coot	
No.	B490 -Natural	Finish				 -					.80	.60	
Vo.	B490N-Nickel P	lated .						4	Ť.		i i	.60	

# INVISIBLE HINGES

#### SOSS

#### Composition Metal, Frictionless Metal Working Parts, Roller Bearings

Can be seen only when the door upon which they are applied is open. No projecting metal on either side of door.

Applied to the same part of jamb and door as the ordinary butts and require no special arrangement. Work smoothly and easily, require no oiling.



#### **Dull Brass** 104 Length Plates, Inches.. Width Plates, Inches.. 1 11 2 % Depth Mortise, Inches... 35 % Min. Thick. Wood, In . . 34 18 Clearance Betw. Plates, Inches ...... Pairs in a Box..... 6 1.2 Wt. Per Box, Lbs..... 2 1/4 Per Pair ..... \$0.40 .75

Nos	108	112	116
Length Plates, Inches	2 34	3 1/2	4 %
Width Plates, Inches	5/8	34	1
Depth Mortise, Inches		18	1 3
Minimum Thick, Wood, Inches.	1	1 1/8	1 %
Clearance Betw. Plates, Inches.	1/2	76	11
Pairs in a Box	2	1	1
Weight Per Box, Lbs	1 1/4	1 1/4	2 %
Per Pair	\$1.10	1.90	2.60
All Above, Packed	with Scre	ws.	

# SUPPORT OR STOP HINGES



No. 1127 ½—Cast Brass, Polished Stops at 180°.

Length C	losed, Inches 3	4
Weight P	er Dozen Pairs, Lbs 3 1/4	5 %
Per Pair	\$2.65	3.00
	One Dozen Pairs in a Box, with Screws.	



No. 1127—Cast Brass, Polished Stops at 105°.

Length Closed, Inches 3	4
Weight Per Dozen Pairs, Lbs 2 34	5 1/2
Per Pair \$2.65	3.00
One Dozen Pairs in a Box, with S	Screws.

# PIN HINGES



No. 3-Cast Brass

Length Closed, Inches		21/4	3	31/4
Weight Dozen Pairs, Lbs	1 1/8	1 1/2	1 %	3
Per Dozen Pair	\$7.80	9.60	11.40	12.60
Two Dozen	Pairs in	a Box.		

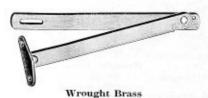
# STAY HINGES



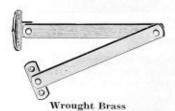
Wrought Steel, Brass Plated

Nos	1721	1723	1734	1735
Length, Inches	4 1/4	7 1/2	10	12
Weight Per Dozen Pairs, Lbs.	34	2 %	3	3 34
Per Dozen Pairs	\$1.40	2.50	3.50	3.75

One Dozen Pairs in a Box.



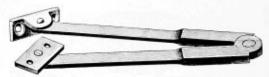
No. 01751—4x4% in., Dipped and Lacquered.....\$3.75 Weight Per Dozen Pairs 1% Pounds. One Dozen Pairs in a Box.



No. 01756—4 14 x 4 14 in., Dipped and Lacquered.... \$3.90 Weight Per Dozen Pairs 1 1/4 Pounds, One Dozen Pairs in a Box.



One Dozen Pairs in a Box, with Screws.



No. 8998—Cast Brass, Polished and Lacquered

Length Open, Inches	10	18
Weight Per Dozen Pairs, Lbs	7	13
Per Dozen Pairs	\$21.60	35.04
10 in One Dozon Potes, 10 to	O 1-14 P	

10 in., One Dozen Pairs; 18 in., One-half Dozen Pairs in a Box.

# HINGE HASPS



Wrought Brass

Length 1% in., Width at Joint % in. Per Dozen No. 03000 14 -Polished and Lac-.....\$0.90 quered ..... Weight Per Dozen 2 1/3 Ounces. Three Dozen in a Box.



Wrought Brass

Length 234 in, Width at Joint 56 in.

Per Dozen

No. 03001 14 -Polished and Lac-quered Weight Per Dozen 3 Ounces. Three Dozen in a Box.



Wrought Brass

Length 3 in., Width at Joint 1/2 in. Per Dozen

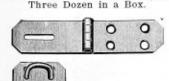
No. 0300214 -Polished and Lacquered .....\$1.10 Weight Per Dozen 7 Ounces. Three Dozen in a Box.



Wrought Brass

Polished and Lacquered. Nos. . . . . . . . . . . . 03004 14 0300534

Length, Inches . . . 2 34 3 % 34 3 34 12 Width Joint, In . . . Wt. Per Dozen, Oz. Per Dozen ..... \$1.15 1.80 ..... 0301114 Length, Inches ..... 3 % Width Joint, Inches..... 1 16 Wt. Per Dozen, Oz..... Per Dozen ..... \$2.75



Wrought Brass

Length 31/2 in., Width at Joint 3/4 in. Per Dozen No. 03006 1/4 -- Polished and Lac-

quered ......\$1.80 Weight Per Dozen 12 Ounces. Three Dozen in a Box.

# HINGE HASPS



Wrought Brass

Length 2 1/2 in., Width at Joint 1 in. Per Dozen

No. 03003 14 -- Polished and Lac-....\$1.65 quered Weight Per Dozen 10 Ounces. Three Dozen in a Box.



Cast Brass

Polished and Lacquered.

...... 0330034 0330134 Nos. 3 1/2 Length, Inches.... 5 Width at Joint, In. 1 1 1/2 Wt. Per Dozen, Lbs. 1 % 5 30 Per Dozen..... \$6.00 18.00 One Dozen in a Box.



Cast Brass

Length Strap 2 % in., Length Pad 1 1/4 in., Width at Joint % in. Per Dozen No. 03306 14 - Polished and Lac-

When locked screws are concealed and protected.

Weight Per Dozen 2 1/4 Pounds. One Dozen in a Box.



Wrought Steel

Length Strap 21/2 in., Length Pad 11/4 in., Width at Joint % in.

Per Dozen No. 346A-Bronze Plated . . . . . \$2.00

When locked screws are concealed and protected. Weight Per Dozen % Pound.

One Dozen in a Box, with Screws.

HINGE HASPS



Wrought Steel

No. 349-A - Bronze Plated

Size, Inches . . Length Strap, In..... 1 1/2 Width at Joint, In ..... 34 Wt. Per Dozen, Lbs.... Per Dozen ..... \$1.90 2.00 One Dozen in a Box, with Screws.

# HINGE CLASPS



Wrought Brass

Length 1% in., Width at Joint % in. Per Dozen No. 850 —Polished ...... \$1.50 No. 850N-Nickel Plated . . . . . 1.60

Weight Per Dozen 2 Ounces. Three Dozen in a Box.



Wrought Brass

Length 2 % in., Width at Joint % in. Per Dozen

No. 0301714 — Polished and Lacquered .....\$2.00 Weight Per Dozen 8 Ounces. Three Dozen in a Box, Right and Left

Hand



Wrought Brass

Length 234 in., Width at Joint 1 in. Per Dozen

No. 0301614 -- Polished and Lac-.....\$2.00

Three Dozen in a Box, Right and Left Hand.





Wrought Brass %x1% Inches.

Per Dozen 

No. 866-Natural Finish . . Weight Per Dozen 3 Ounces. Three Dozen in a Box.

# CORNER BRACKETS



Wrought Brass, Dipped and Lacquered

Nos		03602	03603	03604	03605
	Side, Inches	34	1	1 1/2	2
Width, 1	Inches	1/2	1/2	1/2	1/2
Weight 1	Per Gross, Lbs	1 1/2	2 1/2	4	5
Per Gros	8	\$4.50	4.80	6.00	7.25
	One-half G	ross in	a Box.		



Cast	Brass,	Buffed

Nos	0365434	0365614
Length Side, Inches	2 34	3 1/2
Width, Inches	96	56
Weight Per Dozen, Lbs	1 %	2 %
Per Dozen	84.75	8.00
Three Dozen in	a Box.	



No. 997-Wrought Steel, Bright

Length Side, Inches	1	1 1/2	2	216	3
Width, Inches	1/2	1/2	56	5/8	3/4
Weight Dozen, Lbs	1/3	1/2	3/8	1 1/2	2 1/8
Per Dozen		.41	.53	. 67	.83
Length Side, Inches		4	5	6	8
Width, Inches		76	1	11/4	11/4
Weight Dozen, Lbs		3 34	6	7 1/2	14
Per Dozen			1.93	2.45	3.86

1 to 3 in., Two Dozen; 4 to 6 in., One Dozen; 8 in., One-half Dozen in a Box.



No. 998-C-Wrought Steel, Brass Plated

½ in.				
Length Side, Inches	. 1	1 16	2	216
Weight Dozen, Lbs	. 1/8	1/4	1/6	7/8
Per Dozen	\$0.98	1.06	1.12	1.25
% in. V	Wide.			
Length Side, Inches 1	1 1/2	2	216	3
Weight Dozen, Lbs 1/3	1/3	7/8	1 1/2	1 7/4
Per Dozen \$1.06	1.14	1.25	1.32	1.40
Two Dozen	in a Box			

# MENDING PLATES



No. 995-Wrought Steel, Bright

Length, Inches	2	216	3	4	5	6	8
Width, Inches	5%	5%	-34	3/6	1	1 1/4	1 1/6
Weight Dozen, Lbs.	3/10	1/2	7/10	11/10	2	2 1/2	
Per Dozen	80.46	.54	-63	.80	.95	1.13	1.44
Tw	o Dozei	n in	a Re	VY.			

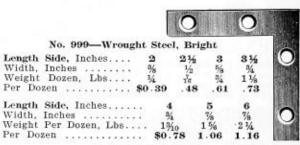
# CORNER PLATES



#### Wrought Brass, Dipped and Lacquered

Nos	03614	03615	03631
Length Side, Inches	2	2 1/2	3 1/2
Width, Inches	1/2	5/8	3/4
Weight Per Dozen, Lbs	1/4	56	14
Per Gross	\$7.90	11.50	16.00

No. 03631, Three Dozen; Others, Six Dozen in a Box.



Two Dozen in a Box.

# "T" PLATES



No. 9951/2-Wrought Steel, Bright

Size, Inches	1	4x4 1½ 2.25	5x5 2 ½ 3 · 15	6x6 5 4.50
6x6 in., One Dozen; Oth	ers, Two	Dozen	in a Box	χ.

# CORNER IRONS



No. 997 1/2 - Wrought Steel, Bright, Corrugated

Length Side, Inches	1/2	1 % 1 ½ 1 ½ . 81	2¼ 1¾ 2½ 1.00
Two Dozen	in a Box.		2.100

# SAMPLE CASE CORNERS



#### Wrought Brass

Size 11/4 in. Per Gross No. 0371214 -Buffed and Lac-Weight Per Gross 2 Pounds. One-half Gross in a Box.



#### Wrought Brass

Size 1 % in. Per Gross No. 0371114 -Buffed and Lacquered .....\$13.50 No. 03711 1/2 -Nickel Plated . . 14.25 Weight Per Gross 5 1/2 Pounds. One-half Gross in a Box.



#### Wrought Brass

Size 1 1/2 in. Per Gross No. 03713 14 -Buffed and Lac-Weight Per Gross 4 Pounds. One-half Gross in a Box.



#### Wrought Brass

Size 1 1/4 x 1/2 in. Per Gross No. 03700 14 -Buffed and Lac-Weight Per Gross 1 1/4 Pounds. One-half Gross in a Box.



#### Wrought Brass

Size 1 % x % in. Per Gross No. 037151/2—Nickel Plated, Buffed ...... 10.80 Weight Per Gross 3 1/2 Pounds. One-half Gross in a Box.

# CHEST CORNERS



#### Wrought Brass

Size 1 % x1 1/2 in. Per Gross No. 03703 14 -Buffed and Lac-Weight Per Gross 6 % Pounds. One-half Gross in a Box.



#### Wrought Brass

Size 2 1/2 x1 1/2 in. Per Gross No. 03705 1/4 - Buffed and Lacquered ...........\$25.85 No. 03705½—Nickel Plated.. 28.00 Weight Per Gross 11 Pounds. One-quarter Gross in a Box.



#### Cast Brass

Size 1 1/2 x 7/8 in. Per Dozen No. 0375414 -Buffed and Lacquered .....\$3.60 Weight Per Dozen 1 % Pounds. One Dozen in a Box.



# Cast Brass

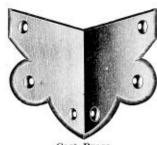
Size 2 1/2 x1 in. Per Dozen No. 03755 14 -Buffed and Lac-Weight Per Dozen 2 1/4 Pounds. One Dozen in a Box.

# CHEST CORNERS



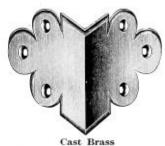
Cast Brass

Size 1½x1½ in. Per Dozen No. 03751 14 -- Buffed and Lacquered .....\$3.00 Weight Per Dozen % Pound. One Dozen in a Box.



Cast Brass

Size  $2\frac{1}{2}x2\frac{1}{2}$  in. Per Dozen No. 0375214 -Buffed and Lac-Weight Per Dozen 2 % Pounds. One Dozen in a Box.



Size 2 1/2 x 2 1/2 in. Per Dozen No. 0375314 -Buffed and Lac-Weight Per Dozen 2 1/2 Pounds. One Dozen in a Box.



Cast Brass

Size 1 % x1 in.

Per Dozen No. 0375034—Buffed and Lac-quered ......\$3.00 Weight Per Dozen % Pound. One Dozen in a Box.

# ESCUTCHEONS



#### Bronz



#### Brass

No. 2606- %	in.									-	 	81.50
No. 2607- %												
No. 2608-11/8	in.	,					*					1.50
Three Dozen	in a		В	lo	X	,	7	V.	it	h	P	ins.



#### Wrought Brass, for Drawer

1 1/2 x1 1/2 in.

Per Dozen
No. 1444—Polished Brass.....\$0.64
No. 1444-DB—Dull Brass......70

Wrought Brass, for Door 11/2 x11/6 in.

1½x1½ in.

Per Dozen

No. 1445—Polished Brass.....\$0.64

No. 1445-DB—Dull Brass..........70

Three Dozen in a Box, with Pins.



#### Brass

No. 2617—1x% in., Polished... \$0.75 Three Dozen in a Box, with Pins.



#### Brass

Per Dozen

No. 2618—1% x | in., Polished. \$0.85

Three Dozen in a Box, with Pins.



No. 0386-Cast Brass, Polished

Size, Inches... ½ % % Per Dozen .... \$2.00 2.00 2.00 One Gross in a Box.

# ESCUTCHEONS





#### Cast Brass

No. 10055—2 in., for Door Only . . . . . . \$0.70

One Dozen in a Box, with Pins,



One Dozen in a Box, with Pins.



# Wrought Brass, for Drawer 1x2 % in.

## Wrought Brass, for Door 2 \% x1 in.



#### Cast Brass

# ESCUTCHEON PULLS



#### Cast Brass

One Dozen in a Box, with Pins.

# COMMODE BUTTONS



#### Wrought Brass Rosette

Solid Brass Bar and Head, Steel Shank and Set Screw, Cast Iron Tongue.



#### Wrought Brass Rosette

Solid Brass Bar and Head, Steel Shank and Set Screw, Cast Iron Tongue.

Per Dozen

No. 922—1½ in. Bar, ½ in.

Head, ¾ x1½ in. Rosette,

⅓ in. Projection........\$1.50

One Dozen in a Box.



Glass Knob

1 ¼ in. Knob, 2 in. Escutcheon.

Per Dozen

No. 721-E—Crystal Glass...... \$5.00

No. 821-E—Opal Glass ...... 5.50

# One Dozen in a Box. CARRIAGE KNOBS



Cast Iron, Japanned

# SASH KNOBS



No. B105—Cast Brass, Bright

 Size, Inches.
 36
 36

 Weight Box, Lbs.
 34
 134

 Per 100
 \$7.50
 \$.00

 Size, Inches.
 36
 34

 Weight Box, Lbs.
 1 36
 34

 Per 100
 \$10.00
 14.00

One Hundred in a Box.

# SHUTTER KNOBS





# Wrought Bronze Size 1 in.



# DRAWER KNOBS



Gioss O	T. D.	
Nos	45-0	44-0
Size, Inches	1	1 1/4
Weight Dozen, Lbs.	10	36
Per Dozen	\$1.00	1.00
Nos	43-0	42-0
	1 1/2	1 34
Weight Dozen, Lbs.	76	1/2
Per Dozen	\$1.00	1.00
	Pe	r Dozen
The Court of All Cinco		80 50

	1 94
Weight Dozen, Lbs. 75	1/2
Per Dozen \$1.00	1.00
Per	Dozen
Unfinished—All Sizes	\$0.50
Solid Mahogany, Glossed	
Nos 45-M	44-M
Size, Inches 1	1 1/4
Weight Dozen, Lbs. &	3/8
Per Dozen \$1.00	1.00
Nos. 43-M	42-M
Size, Inches 11/2	1 3/4
Weight Dozen, Lbs. 15	1/2
Per Dozen \$1.00	1.00
Per	Dozen
Unfinished-All Sizes	\$0.50
Two Dozen in a Box, with Mac	chine
Screws.	

# DRAWER KNOBS



#### No. 5169—Cast Brass

Size,	Inches				1	134
Weig	ht Doze	en,	L	bs	7/8	1 1/4
Per	Dozen				\$3.60	5.00
One	Dozen	in	a	Box,	with	Machine
			Sc	rews		



#### Cast Brass Oval Head, Round Base.

 Nos.
 4516
 4517

 Size, Inches
 ½ x1 ½
 ½ x1 ½

 Weight Dozen, Lbs.
 1½
 1½

 Per Dozen
 \$4.00
 5.00

 No.
 4518

 Size, Inches
 1½ x1 ½

 Weight Dozen, Lbs
 2½

 Per Dozen
 \$7.00

 One Dozen in a Box, with Machine

Screws.



#### No. 5168-Wrought Brass



#### No. 10038—Cast Brass Head, Wrought Brass Rosette

 Size, Inches.
 134
 136

 Weight Dozen, Lbs.
 156
 136

 Per Dozen
 \$1.50
 1.90

 Three Dozen in a Box, with Machine Screws.





# Cast Brass, Antique Brass Finish

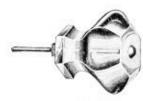
Nos		499-AOB 1-%
Size, Inches Wt. Dozen, Lbs.	4.9	7/4
Per Dozen		2.00
Two Dozen in a	Box, with	Machine
Sc	rews.	

# DRAWER KNOBS



# Crystal Glass, Brass Base

Nos	430	431	432
Size, Inches	1	1 1/2	1 34
Wt. Dozen, Lbs.	5%	1.5%	2 1/4
Per Dozen	\$1.90	2.40	2.75
One Dozen in a		ith Ma	chine
Sc	rews.		



#### Crystal Glass, Nickel Plated Bolt

Nos	19	20
Size, Inches		1 1/8
Weight Dozen, Lbs	116	1
Per Dozen	\$1.00	1.25
Nos	21	22
Size, Inches	1 %	1 34
Weight Dozen, Lbs	1%	2 34
Per Dozen	\$1.40	1.50
Two Dozen in a Bo	x. with	Bolts.



#### No. 5708-Crystal Glass, Brass Base

Size.	Inches		34	1 %	1%
Wt.	Dozen.	Lbs.	10	1 1/8	2 1/2
Per	Dozen.		\$3.00	4.00	4.50
One	Dozen	in a	Box, w	ith Ma	chine
		Sc	rews.		



#### Opal Glass, Nickel Base

Nos	6718 34 13	6717 1 1 1%
Per Dozen	\$5.40	6.15
No		6716
Size, Inches		. 1%
Weight Dozen, Lbs Per Dozen		2 %
One Dozen in a Box		

Screws.

# RING PULLS



 Wrought Brass Plate, Cast Brass Ring

 Nos.
 1543
 1544

 Size Ring, Inches.
 1 ½
 1 ¾

 Size Plate, Inches.
 1 ½
 1 ½

 Per Dozen
 \$4.00
 5.00

 One Dozen in a Box, with Machine Screws.





# PERIOD PULLS



# PERIOD PULLS



Cast Brass, Antique Brass Finish

Single Center Post, Screw Attachment.

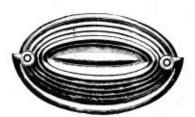
Per Dozen

No. 3290-AOB—1% in. Plate..\$2.00 No. 3291-AOB—2% in. Plate..\$2.50 Two Dozen in a Box.



Wrought Brass Plate, Cast Brass Bail
Per Dozen
No. 1419—2½ in. Center to
Center of Studs, 2½x3 in.
Plate ............\$4.60
One Dozen in a Box, with Machine
Screws.





# ROSETTE BAIL PULLS



Wrought Brass Rosettes, Cast Brass Bail

3 in, Center to Center of Studs.

Per Dozen

No. 5554 — Polished ....... \$5.80

No. 5554-DB—Dull Brass ..... 6.50

One Dozen in a Box, with Machine



Wrought Brass Rosettes, Solid Brass Bail

3 in. Center to Center of Studs, Offset Bail.

Per Dozen

No. 1548—Polished . . . . . . . \$2.50 One Dozen in a Box, with Machine Screws.



Wrought Brass Rosettes, Cast Brass Bail

3 in. Center to Center of Studs.
Per Dozen
No. 6005 —Polished ......\$3.50
No. 6005-DB—Dull Brass..... 4.00
One Dozen in a Box, with Machine
Screws.



Wrought Brass Rosettes, Solid Brass Bail



Wrought Brass Rosettes, Brass Plated Bail

Studs Adjustable from 3 to 31/4 in. Center to Center.

# DRAWER PULLS



Wrought Brass Plate, Brass Plated Bail

Per Dozen No. 1462-1 1/2 x4 in. Plate, 3 in. from Center to Center of Studs......\$0.90 Three Dozen in a Box, with Bolts and Nuts.



Wrought Brass Plate, Brass Plated Bail

Per Dozen No. 1541-1%x3% in. Plate, 3 in. from Center to Center of Studs..... Three Dozen in a Box, with Bolts and Nuts.



Wrought Brass Plate, Brass Plated Bail 1%x4% in. Plate, 3 in. from Center to Center of Studs.

.....\$1.20 Three Dozen in a Box, with Bolts and Nuts.



Wrought Brass Plate, Cast Brass Bail

No. 1405-1%x3% in. Plate, 2 in. from Center to Center of Studs.....\$7.50 No. 1406-1 1/2 x5 1/4 in. Plate, 3 in. from Center to Center of Studs..... 8.00 One Dozen in a Box, with Machine Screws.



Wrought Brass Plate, Solid Brass Bail

Per Dozen No. 5935-112x4 % in. Plate, 3 in. from Center to Center of Studs......\$6.50 One Dozen in a Box, with Machine Screws.

# DRAWER PULLS



Cast Brass

Per Dozen No. 10052-2x5 in. Plate, 3 in. from Center to Center of Studs......\$4.80 One Dozen in a Box, with Screws.



Crystal Glass, Nickel Plated Bolts

Per Dozen

No. 36-H-3 in, from Center to Center of Bolts.... \$6.50 One Dozen in a Box, with Bolts.

# PENDANT PULLS

#### CHALFONT PATTERN



Cast Brass, Antique Brass Finish

Single Post, Screw Attachment. Per Dozen

No. 2948-AOB-Length Over All 2 1/8 in., Width Over All 1 1/8 in. .....\$2.00

No. 2949-AOB-Length Over All 2 % in., Width Over All 1 % Two Dozen in a Box.

#### DOVER PATTERN

Wrought Steel Back, Cast Brass Post and Pendant, Antique Brass Finish

Single Post, Screw Attachment.

Per Dozen No. 2850-AOB-Length Over All 2 1/2 in., Diameter of Back 1 in. \$2.00 No. 2851-AOB-Length Over All 3 1/8 in., Diameter of Back 1 1/8 in. ......

Two Dozen in a Box.



# MIRROR SCREWS



Cast Brass, Steel Bolt

Per Dozen

No. 75-AOB—Length Over All

4 1/4 in., Bolt 2 3/4 in., Antique Brass Finish......\$4.00

One Dozen in a Box.



Cast Brass, Steel Bolt

No. 5152—1 ¼ in. Ring, 3 ½ in. Bolt ......\$4.00

One Dozen in a Box.



Crystal Glass, Brass Base, Steel Bolt

One Dozen in a Box.

# DRAWER PULLS



Cast Bronze

Three Dozen in a Box, with Screws.



Wrought Bronze

Three Dozen in a Box, with Screws.

# DRAWER PULLS



Cast Iron

Cast Bronze

No. B4365½—3 in., Polished Bronze, Weight Per Dozen

| 1½ Lb. . . . . . . . . . . 6.65

No. B4366 ½ — 4 in., Polished
Bronze, Weight Per Dozen
1 ½ Lbs. . . . . . . . . 7.20

One Dozen in a Box, with Screws.



# Wrought Steel

Per Gross No. J3371—3 % in., Japanned, Weight Per Dozen % Lb...\$4.60

Wrought Bronze



Cast Iron Size 3 in.

Size 4 in.

No. EA3367½—Dull Brass, Natural Color . . . . . . . . . 1.65 Weight Per Dozen 2 Pounds.

# Cast Bronze

Size 3 in.

No. A4367—Polished Brass.... 5.58 Weight Per Dozen 1 % Pounds.

Size 4 in.

No. EA4367½—Dull Brass, Nat-

Weight Per Dozen 2 Pounds. One Dozen in a Box, with Machine Screws.



#### Cast Iron, Amber Bronzed Per Dozen

# DRAWER PULLS

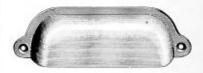


## Wrought Steel

Size 3 1/2 in.

# Wrought Bronze,

Size 31/2 in.



# Wrought Steel

Size 31/2 in.

Size 4 in.

Three Dozen in a Box, with Screws.

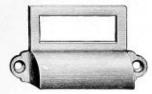
# Wrought Bronze

Size 3 1/2 in.

No. B1364—Polished Bronze... 2.45
No. EA1364—Dull Brass, Natural Color ...... 2.45
Weight Per Dozen ¾ Pound,

Size 4 in

# DRUGGIST DRAWER PULLS



Cast Iron

Size 1 ½ x 3 ¼ in., Opening 5 ½ x 1 ¾ in.

Per Dozen

No. EA01631 ¼ — Dull Brass,

Natural Color ....... \$4.20

Weight Per Dozen 1 ½ Pounds.

Size 2 ½ x 4 ½ in., Opening ½ x 2 ½ in.

No. EA01632 ¼ — Dull Brass,

Natural Color ...... 5.10

Weight Per Dozen 2 ¼ Pounds.

#### Cast Bronze

Size 1 ½ x3 ¼ in., Opening % x1 ¾ in. Per Dozen

No. B1631—Polished Bronze...\$6.30

Weight Per Dozen 1 ½ Pounds.

Size 2 ½ x4 ¼ in., Opening ¾ x2 ½ in.

No. B1632—Polished Bronze...\$.90

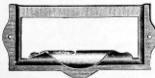
Weight Per Dozen 2 5% Pounds.

One Dozen in a Box, with Screws.

# CARD HOLDERS WITH PULLS



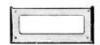




# CARD HOLDERS WITH PULLS

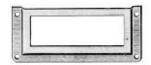


# CARD HOLDERS



Weight Per Gross 1 % Pounds. One-quarter Gross in a Box.





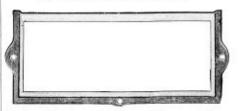
Weight Per Gross 3¾ Pounds One-quarter Gross in a Box.

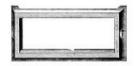


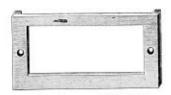
# CARD HOLDERS



Wrought Brass, Buffed and Lacquered Per Gross No. 1914¼—Card Space  $2\frac{1}{10}x^3$ in......\$27.50 Weight Per Gross 7½ Pounds. One-quarter Gross in a Box.





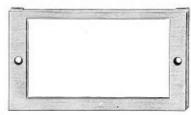


Three Dozen in a Box, with Screws.

Cast Bronze, Polished

If It's
BUILDERS' HARDWARE
We Have It

# CARD HOLDERS



# NAME PLATES





 Wrought Brass, Dipped and Lacquered

 Nos.
 ...
 028
 030
 032

 Length, Inches.
 3
 4
 5

 Width, Inches.
 %
 %
 %

 Wt. Gross, Lbs.
 1 ½
 2 ½
 3

 Per Gross
 \$5.50
 6.20
 7.90

 One Gross in a Box.

# FLUSH RINGS

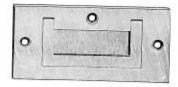


No. 1179—Cast Brass, Polished
Size, Inches... 1 1¼ 1½
Size, Plate, In... 1½ 1 ½ 2x1½
Wt. Dozen, Lbs. ½ 1 ½ 1½
Per Dozen... \$3.60 4.80 6.00
Three Dozen in a Box, with Screws.



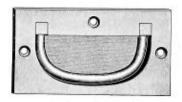
No. 1181½—Cast Brass, Polished Size, Inches. . . . . 1¼ 1½ Wt. Dozen, Lbs . . ½ ¼ Per Dozen . . . . . \$4.55 5.35 Three Dozen in a Box, with Screws.

# FLUSH DRAWER HANDLES



#### Cast Brass, Polished

Weight Per Dozen 2¼ Pounds. One Dozen in a Box, with Screws.



Cast Brass, Polished

Nos	724 36	72714
Size, Inches	2x3 1/2	2 1/4 x 4
Wt. Dozen, Lbs	2 1/2	3 1/2
Per Single Dozen	\$14.65	16.00

One Dozen in a Box, with Screws.

# TRAY HANDLES





# LIFTING HANDLES



Cast Brass, Polished Bail Swings Both Ways.

 Nos.
 516 ½
 518 ½

 Width Bail, In.
 2 ½
 3 ½

 Wt. Dozen, Lbs.
 1 ½
 1 ½

 Per Single Dozen
 \$6.95
 8.20

Cast Brass, Polished

Bail Swings One Way.

 Nos.
 516
 518

 Width Bail, In.
 2½
 3½

 Wt. Dozen, Lbs.
 1¼
 2

 Per Single Dozen
 \$6.95
 8.20

 Two Dozen in a Box, with Screws.



Cast Iron, Japanned

Nos	162	163
Width Over All, In		4 %
Weight Box, Lbs	3 %	4 34
Per Pair	\$0.30	.34
Ten Pairs in	a Box.	

# LEATHER HANDLES



No. 4—6 in., Leather Covered.. \$6.00 Weight Per Dozen 1% Pounds. One Dozen in a Box.

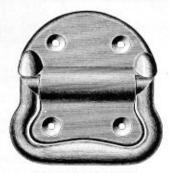


No. 5—6 in., Leather Covered...\$6.00 Weight Per Dozen 2 % Pounds. One Dozen in a Box.



Per Dozen
No. 7—6 in., Leather Covered...\$6.00
Weight Per Dozen 1 % Pounds,
One Dozen in a Box

# CHEST HANDLES



Cast Iron, Japanned

01871	1871	1872
3x3	3 1/2 x 3 1/2	4x4
8 1/2	14	18%
\$3.00	3.60	4.70
	3 x 3 8 1/2	3 x 3 3 ½ x 3 ½ 8 ½ 14

One-quarter Dozen Pairs in a Box, without Screws.

#### Cast Brass, Polished

Nos	01871 1/2	1871 34	1872 1/2
Size, Inches	3x3	3 1/2 x 3 1/2	4x4
Wt. Per Dozen Pairs, Lbs.	8 %	16 1/2	20 34
Per Dozen Pairs	\$40.00	35.20	52.80

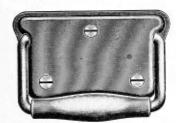
One-quarter Dozen Pairs in a Box, with Screws.



No. 1250J-Wrought Steel, Japanned

Width Handle, Inches 31/2	4
Size Plate, Inches 3 1/4 x 3 1/8	4 1/4 x 3 1/4
Weight Per Dozen Pairs, Lbs 9 1/2	12 1/2
Per Dozen Pairs \$5.70	7.95

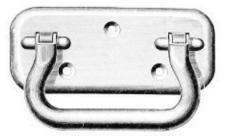
One-quarter Dozen Pairs in a Box, with Screws.



Wrought Steel, Tubular Grip, Japanned Per Dozen Pairs

Weight Per Dozen Pairs 16 Pounds. One Pair in a Box, with Screws.

# CHEST HANDLES



Wrought	Ctool	Dame	Distant

Nos	B2081	B2082
Width Handle, Inches	3 1/2	4
Size Plate, Inches	1 1/4 x 4 1/4	2x434
Weight Per Box, Lbs	2 1/4	2 %
Per Pair	\$0.42	. 45
Five Pairs in a Box, w	ith Screws.	

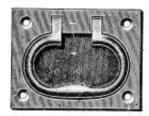


#### Wrought Steel, Brass Plated

Per Single Dozen
No. 567—Length Over
All 3½ in.....\$1.44
Weight Per Dozen 2½
Pounds.

One Dozen in a Box, with Screws.

#### FLUSH



#### Cast Iron, Japanned

Nos	1874	1875	1876
Size, Inches		2 1/2 x 3 1/2	3 1/2 x 4 1/4
Wt. Dozen Pairs, Lbs		10	22 1/2
Per Dozen Pairs	\$4.90	5.00	8.00
One-half Dozen Pairs in	a Box, w	ithout Scr	ews.

# Cast Brass, Polished

Nos	187416	1875 16	187636
Size, Inches		2 16 x 3 1/2	3 1/2 x 4 1/4
Wt. Dozen Pairs, Lbs		10 1/2	23
Per Dozen Pairs	- 140		53.30
One half Dozon Pairs in			8

# TUB HANDLES



Wrought Steel, Japanned

Per Pair

No. 77—Width of Handle 4¼ in., 1¾x4 in. Heavy
Curved Plate
Weight Per Box 7¾ Pounds.
Ten Pairs in a Box.

# LAVATORY SPRING HINGES

BOMMER, SINGLE ACTION



For lavatory doors on marble or slate partitions having hanging stile. Can be used for either right or left hand doors opening in or out.

For marble or slate partitions 1, 1¼, 1½, 1¾ or 2 in. thick. Clamp is adjustable ¼ in. over or under sizes to allow for variations in thickness of marble.

Length of Flanges 4 in., One Clamp Flange.

		Per Pair
No.	1000B-Bronze, Highly Polished	 . \$17.60
No.	1000N-Brass, Nickel Plated	 . 17.60

These hinges are made to close the door, but can be furnished to order to swing door open and hold it open.

Note-Always state Thickness of both Marble and the Door.

Weight Per Pair 3 Pounds. One Pair in a Box, with Bolts and Screws.

#### HINGES AND BLANKS

For extra light and narrow Single Action Lavatory Doors a Spring Hinge and a Blank may be used.

No. 01000 Blank has 2 in. Flanges with one Clamp Flange.



No. 01000 Blank. Per Set.

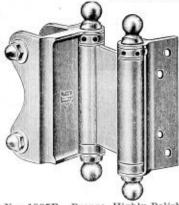
No.	1000Bx01000B-	-Bronze,	Highly	Polished		.70
No.	1000Nx01000N-	-Brass,	Nickel	Plated	. 14	.70

Set consists of one No. 1000 Spring Hinge and one No. 01000 Blank.

Weight Per Set 2 % Pounds.

One Set in a Box, with Bolts and Screws.

## DOUBLE ACTION



For lavatory doors on marble or slate partitions having hanging stile. Can be used for either right or left hand doors opening in or out.

For Marble or slate partitions 1, 14, 14, 14 or 2 in. Thick.

Clamp is not adjustable. Length of Flanges 4 in., one Clamp Flange.

| Per Pair | No. 1005B—Bronze, Highly Polished | \$27.20 | No. 1005N—Brass, Nickel Plated | 27.20 |

Note-Always state exact Thickness of both the Marble and the Door.

Weight Per Pair 5 % Pounds. One Pair in a Box, with Bolts and Screws.

# LAVATORY DOOR STRIKES

#### BOMMER

For lavatory doors on marble or slate partitions. The strikes have rubber bumpers, and are suitable for use on partitions 1, 14, 14, 14, or 2 in. thick.

The boxes are adjustable 1/2 in. over and under sizes to allow for variations in thickness of marble.



For Mortise Bolt, Reversible for Right or Left Hand Door opening in or out.

Weight Each % Pound.

One in a Box, with Bolts.



For Throw Latch, Reversible for Right or Left Hand Door opening in.

No. 1052B—Bronze, Highly Polished ......\$4.00 No. 1052N—Brass, Nickel Plated 4.00

Weight Each % Pound.

One in a Box, with Bolts.



For Rim Bolt, Reversible for Right or Left Hand Door opening in.

Weight Each % Pound.

One in a Box, with Bolts.



For Throw Latch, Reversible for Right or Left Hand Door opening out.

Weight Each 54 Pound.

One in a Box, with Bolts.

Note-In ordering any of the above Strikes always state Thickness of Marble and Door.



For use on Face of Door.

 No. 1070B—Bronze, Highly Polished.
 Each \$1.10

 No. 1070N—Brass, Nickel Plated.
 1.10

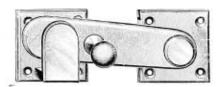
Weight Per Box % Pound. Six in a Box, with Screws.

# LAVATORY DOOR LATCHES



#### Cast Bronze, Polished

Length Bar 4 in., Plates, 2 in. Diameter and 2 1/2 x 3/4. Each Weight Per Dozen 6 Pounds. One-half Dozen in a Box, with Screws.

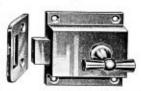


#### Cast Bronze, Polished

Length Bar 5 in., Plates 2x2 in.
Each   Each
Weight Per Dozen 12 1/4 Pounds.
One-half Dozen in a Box, with Screws.

# LAVATORY DOOR BOLTS

RIM, WITH INDICATOR





Each

#### Cast Bronze, Polished

2 1/2 x 2 5/8 in. Case, 1 5/8 in. Backset.

B156—Natural Color, Polished	
Weight Per Dozen 12 Pounds.	
One in a Box, with Screws.	

# MORTISE, WITH INDICATOR



#### Cast Bronze, Polished

	Polished
No. E15714 -Nickel Plated,	Polished 3.00
set, 3x11 in. Cast Bronze	anned Iron Case, 1¾ in. Back- Front, Cast Bronze Bolt, Cast perated by Thumb Knob from

Weight Per Dozen 11 1/2 Pounds. One in a Box, with Screws.

# LAVATORY STALL STANDARDS

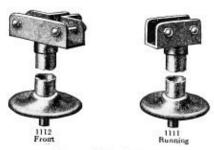
#### BOTTOM STANDARDS

These Standards are 12 in. in height and made for 11/4 in. stile and 1 % in. partition marble. Height is from floor to under side of marble. Post is 1 % in. outside diameter, flange 2 % in. diameter.



# Brass, Nickel Plated

Each No. 1110—End Piece, Weight Each 115 Lbs.......\$7.80 Open Stock.



# Brass, Nickel Plated

No. 1112—Front Piece, Weight Each 2 1/4 Lbs...... \$9.50 No. 1111—Running Piece, Weight Each 2 1/5 Lbs..... \$7.90 Open Stock.



#### Brass, Nickel Plated

No. 1113—Right Corner Piece, Weight Each 2 % Lbs. \$8.00 No. 1114—Left Corner Piece, Weight Each 2 % Lbs. 8.00 Open Stock.

# LAVATORY STALL FITTINGS

ANGLE CLAMPS



Brass, Nickel Plated

No. 1133-1%x1%x1 in., Weight Per Box 1 Lb....\$0.90 Six in a Box.

# SPRING BUTT HINGES

BOMMER, DOUBLE ACTING



Three Leaf Type



In the double acting spring hinge the barrels and their connecting plate are integral and made of a thick, solid, strong plate of metal of full and even thickness throughout, formed into a contour giving great surplus strength.

The springs are of large diameter and unusual length, made of the best oil tempered steel wire, giving them great resilience and power.

Wrought Steel, Planished Japanned Dead Black

		the territory and the		
Nos		30	33	36
Lgth. Flanges, In.	3	4	5	6
For Doors, In	34 to 1	% to 1 1/4	1% to 1%	114 to 1%
Wt, Pair, Lbs		3 5%	5 1/2	8
Per Pair		6.10	7.20	8.90
Nos	39	42	45	48
Lgth. Flanges, In.	7	8	10	12
For Doors, In	1% to 2	1 1/2 to 2 1/4	1 % to 2 1/2	2 1/4 to 3
Wt. Pair, Lbs	10 %	16	23	35
Per Pair	\$11.40	16.50	22.80	30.40

Bronze or Brass Plated 486 479 480 483 Lgth. Flanges, In. 5 For Doors, In... % to 1 Wt. Pair. Lbs... 2 % % to 1% 1% to 1% 1% to 1% Wt. Pair, Lbs... 3 5% 5 16 12.40 Per Pair ..... \$6.90 8.30 9.70 489 492 495 Lgth. Flanges, In..... 8 10 For Doors, In.......... 1% to 2 1 1/2 to 2 1/4 1% to 2 1/2 10 % Wt. Pair, Lbs..... 16 23 22.80 Per Pair ..... \$16.00 31.40

Note-In ordering, state whether bronze or brass plated are wanted. Antique Conner

	Antiqu	te Copper		
Nos	329	330	333	336
Lgth. Flanges, In.	3	4	5	6
For Doors, In	% to 1	% to 1 14	1% to 1%	1% to 1%
Per Pair	\$6.90	8.30	9.70	12.40
Nos		339	342	345
Lgth. Flanges, In.		7	8	10
For Doors, In		1% to 2	1 1/2 to 2 1/4	1% to 2 1/2
Per Pair		\$16.00	22.80	31.40
	Dull	Brass		

37411	Dies		
629	630	633	636
3	4	5	6
	% to 1 1/4 8.30	1 % to 1 % 9 . 70	1% to 1% 12.40
	639 7	642 8	645 10
		1 1/2 to 2 1/4 22 . 80	1% to 2% 31.40
	629 3 % to 1 \$6.90	3 4 % to 1 % to 1 14 \$6.90 8.30 	629 630 633 3 4 5 5 4 101 11 11 11 11 11 11 11 11 11 11 11 11

	Nick	cel Plated		
Nos	879	880	883	886
Lgth, Flanges, In.		4	5	6
For Doors, In		% to 1 1/4	1% to 1%	1% to 1%
Per Pair	\$9.20	11.00	13.20	16.00

#### Solid Bronze Polished Bronze Finish

Nos	129	130	133
Length Flanges, In		4	5
For Doors, In	% to 1	% to 1 1/4	1% to 1%
Per Pair	\$18.30	20.80	25.60
Note-Solid Bronze	continued	on next co	lumn.

# SPRING BUTT HINGES

BOMMER, DOUBLE ACTING Three Leaf Type-Continued Solid Bronze

Polished Bronze Finish

136 139

NOS.	100	109	142
Length Flanges, Inches.	6	7	8
For Doors, In	1 14 to 1 %	1 % to 2	1 1/2 to 2 1/4
Per Pair		40.30	54.10
17,000	Dull Brass		
Nos	729	730	733
Length Flanges, Inches.	3	4	5
For Doors, In		% to 1 14	1 % to 1 %
Per Pair		23.30	28.20
Nos	736	739	742
Length Flanges, Inches.	6	7	8
For Doors, In	1% to 1%	1% to 2	1 1/2 to 2 1/4
Per Pair	\$34.70	44.30	59.50
Nic	ckel Plated		
Nos	829	830	833
Length Flanges, Inches.	3	4	5
For Doors, In	% to 1	% to 1 14	1 1/4 to 1 1/2
Per Pair		23.30	28.20
Nos	836	839	842
Length Flanges, Inches.	6	7	8
For Doors, In		1% to 2	1 1/2 to 2 1/4
Per Pair	\$34.70	44.30	59.50
One Pair in	a Box, with	h Screws.	

# BOMMER EVER READY, DOUBLE ACTING



No Hanging Strip Required



In the Ever Ready Double Action Spring the use of a hang-ing strip is eliminated, which greatly simplifies the fitting of the door.

The barrels and the connecing plate are integral, and made of a thick, solid, strong plate of metal of full and even thickness throughout, formed into a contour giving great, surplus of strength. The springs have great resilience and power,

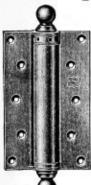
#### Wrought Steel, Planished Japanned Dead Black

	*****	
3029	3030	3033
3	4	5
34 to 1	% to 1 1/4	1 1/4 to 1 1/2
2 1/2	3 7/4	5 %
\$5.10	6.10	7.20
	3036	3039
	. 6	7
	1 14 to 1 34	1 % to 2
	8 34	111/4
	. \$8.90	11.40
3329		3333
3	4	5
% to 1	% to 1 14	1% to 1%
\$6.90	8.30	9.70
	2226	3339
	. 6	7
	1 1/4 to 1 3/4	1% to 2
	812.40	16.00
nll Rense		
3629	3630	3633
3	4	5
% to 1	34 to 1 14	1% to 1%
\$6.90	8.30	9.70
	3636	3639
	6	7
	1 1/4 to 1 3/4	1% to 2
	\$12.40	16.00
	2 ½ \$5.10 ique Coppe 3329 3 ¾ to 1 \$6.90 will Brass 3629 ¾ to 1 \$6.90	3 4 34 to 1 % to 1 ¼ 2 ½ 3 % 85.10 6.10

One Pair in a Box, with Screws.

# SPRING BUTT HINGES

BOMMER SINGLE ACTING



In this single action spring hinge the barrel and its leaf for fastening to the door are integral and made of a thick. solid, strong plate of metal of full and even thickness throughout, formed into a contour giving great surplus strength.

The springs are of large diameter and unusual length, made of the best oil tempered steel wire, giving them great

resilience and power.

Single action hinges are made to close the door, but can be furnished to special order with reverse acting springs to swing the door open and hold it open without extra charge.

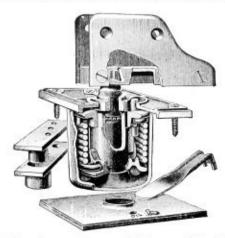
	000000000000000000000000000000000000000			
Wr	ought 8	Steel, Pla	nished	
J J	apanned	l, Dead B	llack	
Nos	0	1	5	9
Lgth. Flanges, In. For Doors, Inches. Wt. Per Pair, Lbs. Per Pair	3	4	5	6
For Doors, Inches.	% to 1	% to 1 1/4	1% to 1%	1% to 1%
Wt. Per Pair, Lbs.	1 1/3	1 %	2 7/8	4 1/4
Per Pair	\$3.10	3.70	4.30	5.30
Nos		13	17	21
Length Flanges, Inc.	hes	7	8	10
For Doors, Inches		1 % to 2	1 1/2 to 2 1/4	1% to 2 1/2
Weight Per Pair, L		6 1/4 \$6 . 80	8 % 9 . 90	11 ¾ 13.70
Per Pair				10.70
		Brass P		459
Nos Lgth. Flanges, In.	450 3	451	455 5	6
For Doors, Inches.				
Per Pair	\$4.00	5.00	1 1/4 to 1 1/2 5.90	7.40
			467	471
Nos	hes		8	10
For Doors, Inches		1 % to 2	1 1/4 to 2 1/4	
Per Pair		89.60	13.70	18.80
Note-In orderin	ig state	if bronz	e or brass	
wanted.	-			
		ne Copper		10000000
Nos.	300		305	309
Lgth. Flanges, In.	3	4	5	11/ 40 13/
For Doors, Inches. Per Pair	% to 1	% to 1 ¼	1 % to 1 ½	1 % to 1 %
		S100 50 50 50 50 50 50 50 50 50 50 50 50 5	5.90	7.40
Nos.			317	321 10
Length Flanges, Inc	nes	7 7 40 9	11/ to 91/	
For Doors, Inches. Per Pair		\$9.60		18.80
rer rair			10.10	10.00
Voc		l Brass 601	605	609
Nos	3			6
Lgth. Flanges, In. For Doors, Inches. Per Pair	34 to 1	34 to 1 14	1 1/6 to 1 1/6	1% to 1%
Per Pair	84.00	5.00	5.90	7.40
Nos			617	621
Length Flances Inc	hes	7	8	
Length Flanges, Inc For Doors, Inches.		1% to 2	1 1/2 to 2 1/4	1 % to 2 1/2
Per Pair		\$9.60	13.70	18.80
	Nick	el Plated		
	850	851	855	859
Leth Flances In	3	4	5	6
For Doors, Inches.	% to 1	% to 1 %	1 % to 1 %	1% to 1%
Per Pair	\$5.50	6.60	7.80	9.00
Nos			867	871
Longth Flanges Inc	ches	. 7	8	10
For Doors, Inches.			1 1/2 to 2 1/4	1 % to 2 1/2
Per Pair			17.00	28.20
		1 Bronze		
		Bronze F		100
Nos	100	101	105	109
Lgth. Flanges, In.	3	7/ 40 1 1/	5 11/ to 11/	11/ to 13/
FOR DOORS Inches.	49 LO 1	% to 1 1/4	1% to 1 ½	19.00
Per Pair			15.00	19.00
120		el Plated		800
Nos	800	801	805	809

One Pair in a Box, with Screws.

3

# MORTISE FLOOR SPRING HINGES

BOMMER SPRING PIVOT, BALL BEARING



Heavy Wrought Steel Frame, Oil Tempered Steel Spring, Tool Steel Ball Bearings

#### Japanned Dead Black

Nos, .....

For Doors, Inches	% to 1 ½ 6	1 % to 2 8 1/4
Per Set	\$5.40	8.10
Bronze Plated	L	
Nos	452 % to 1 ½ \$8 · 10	1% to 2 12.00
Antique Copper	r	
Nos. For Doors, Inches.	302 % to 1 ½ \$8 · 10	304 1% to 2 12.00
Dull Brass		
Nos	602 % to 1 ½ \$8 · 10	604 1 % to 2 12.00

This Spring Pivot Hinge swings the door double action, but by using a stopbead on the casing, it works equally well single action. It is easily fitted to a door of any thickness as the shoe is adjustable.

The weight of the door is supported on tool steel ball bearings set upon a raised center post. The ball bearings are covered by a hollow spindle which allows no water, dirt or grit to reach them, making them wear years longer.

Only the best oil tempered springs are used. All parts are interchangeable. No hanging strap is required, the back edge of the door being slightly rounded.

These hinges have springs correctly set up for the doors specified but the tension may be increased or decreased if desired after the hinge is in place.

They impart an easy movement to the door, are durable

and noiseless, and do not permit the door to sag. Regularly furnished with side plates, top pivot and top pivot socket.

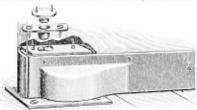
One Set in a Box, with Wrench and Screws.

# EXTRA SPRINGS

	Oil Tempered Steel Wire
No.	C10-2—For Nos. 2, 452, 302 and 602 Floor Spring Hinges
No.	C10-4—For Nos. 4, 454, 304 and 604 Floor Spring Hinges

# SURFACE FLOOR SPRING HINGES

SHELBY CHIEF BALL BEARING, DOUBLE ACTING



Heavy Wrought Steel Frame, Best Oil Tempered Steel

Spring, Steel Foot Plate
For Doors 11/8 to 13/4 in. Thick Per Set
No. 42-Antique Copper, Planished, Weight Per Set
3 % Lbs
No. 15-Dull Brass, Weight Per Set 3% Lbs 3.75
No. 31-Antique Brass, Sanded, Weight Per Set 3 %
Lbs
For Doors 134 to 2 in. Thick
No. 44-Antique Copper, Planished, Weight Per Set
5 ½ Lbs
No. 17—Dull Brass, Weight Per Set 5 1/2 Lbs 4.55
No hole in the floor is necessary in installing this hinge, as it rests upon the surface of the floor.
Furnished with jamb plates, when specified at a slight
advance in price. Recommended for use where it is de-
sired to hang the door to the jamb instead of leaving the

hinge rest upon the floor. The hinge holds the door open when it is swung to 90

degrees. One Set in a Box, with Screws.

# CHECKING FLOOR HINGES

RIXON SINGLE ACTING



Cast Brass Floor Plate, Best Oil Tempered Steel Spring

Complete with cement case which is necessary in cement or other masonry floor, and bronze pivot for top of door.

Each Dull Brass

No. 25-6 1/8 x9 3/8 in. x 4 1/6 in. Deep, for Outside Doors up to 3 ft. 6 in. Wide x 7 ft. 6 in. High, Weight Each 42 Lbs......\$38.00

This hinge will permit the door to open clear back, 180 degrees, and close from this point. The tension is

adjustable to take care of varying conditions. The weight of the door rests on a drop forged and case

hardened steel spindle which is supported on a bearing composed of ten 1/4 in. balls which run in a case hardened ball race. The door can be raised or lowered at any time to take care of sagging. The whole device is filled with checking fluid of high lubricating qualities and will not freeze at 40 degrees below zero.

Note-In ordering, state if for Right or Left hand door. One in a Box, with Screws.

#### RIXON JUNIOR DOUBLE ACTING



For Use on Light Interior Doors Permits the door to swing in both directions, closing it gently and bringing it to rest at center without any "Flip-Flap."

All wearing parts are of case hardened steel and immersed in a lubricating liquid which also serves to check the closing speed of the door.

Automatically holds door open at right angles.

Dull Brass Each

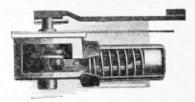
Rixson Junior-For Light Interior Doors up to 2 ft. 8 in. Wide...... .....\$10.00 Rixson Junior Cement Case-For Use in Masonry

Note-Can be furnished without Hold-Open Feature when so ordered at same price.

One in a Box, with Screws.

# CHECKING FLOOR HINGES

RIXSON DOUBLE ACTING



Cast Brass Floor Plate, Best Oil Tempered Steel Spring

 $4\,\%\,x\,8\,\%$  in. x 3 in, deep. The dimensions are the same for either the No. 10 or No. 15, and are the same with or without cement case. A cast iron cement case must be used when check is set in cement or other masonry floors.

#### Dull Brass

No. 10-For Doors Up to 2 ft. 8 in. Wide, Weight ....\$15.00 Each 10% Lbs..... No. 15-For Doors Up to 3 ft. Wide, Weight Each

No. 10C—Cement Cases, Weight Each 4 Lbs..... No. 15C—Cement Cases, Weight Each 4 Lbs.....

This device was designed for pantry doors, gates in office railings, etc.

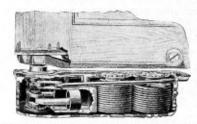
It permits the door to swing in both directions, yet brings it quietly back to rest at center, without any flipflap. The oil checking feature makes it operate the same as an ordinary liquid door check and closer.

It automatically holds the door open when opened to 90 degrees.

When used for railing gates a special top pivot and arm is furnished when so ordered.

This hinge has no side plates.

One in a Box, with Screws.



Cast Brass Floor Plate, Best Oil Tempered Springs

Complete with cement case for use in cement or other masonry floors.

Dull Brass

Each

No. 30-5 1/2 x14 1/4 in. x 3 1/8 in. Deep, for Outside Doors up to 2 ft. 10 in. x 7 ft. 6 in., Weight Each 52 Lbs.....

No. 40-61/8 x171/8 in. x 41/8 in. Deep, for Outside Doors up to 3 ft 6 in. x 7 ft. 6 in., Weight Each

This device has two springs and two checking mechanisms, one spring and check operating when the door swings on one side of the doorway, and the second spring and check operating when the door swings on the other side of the doorway.

This causes the check to function perfectly on windy days when it takes a great deal of spring power to close the door after it has been opened inwardly, but very little checking resistance to keep the door from slamming, while when the door is opened outward a great deal of checking resistance is needed to keep the door from slamming, and very little spring power to close it.

The spindle, links and other parts subjected to wear are made of drop forged steel and case hardened. spindle runs on fi in. steel balls and the whole device is filled with non-freezing checking fluid, which possesses high

lubricating qualities.

One in a Box, with Screws.

# LIQUID DOOR CHECKS

CORBIN 1911 MODEL



Right or Left Hand without change. Not affected by extremes of temperature, and can be adjusted to any draught by a turn of a screw.

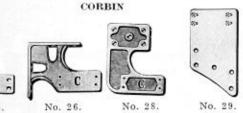
The rack and pinion keep the door under checking control from the moment the motion of closing begins until the door touches the stop noiselessly and is held in close contact with it.

Cast Iron, Columbian Bronzed Each
No. 1-For Screen Doors, Weight Each 614 Lbs \$ 8.65
No. 2-For Light Inside Doors Not Over 7x3 ft.,
Weight Each 8 1/4 Lbs 11.00
No. 3-For Vestibule, Heavy Inside, or Any Outside
Door Not Over 7x2 ½ ft., Weight Each 13 ½ Lbs. 13.35
No. 4-For Outside Doors Not Larger than 71/2x3
ft., Weight Each 17% Lbs
No. 5-For Doors Not Larger than 7 1/2 x4 ft., Weight
Each 22 Lbs 21.35
No. 6-For Extra High and Extra Heavy Doors,
Such as are Used in Public Buildings, Weight
Each 27 Lbs
If door is Unusually Heavy, or Very Strong Draughts are
to be Encountered, Use One Size Larger than Specified.
Note-Can also be furnished with Hold Back feature to

Note—Can also be furnished with Hold Back feature to hold the door Open at any desired angle. In ordering Checks with Hold Back Attachment prefix 10 to number as 101, 102, etc.

One in a Box, with Screws and Instructions for Applying.

# DOOR CHECK BRACKETS



Company of the		Co. Commerce			9
No. 25.	No. 26.	No. 2	8.	No. 2	9.
	Cast Iron, Colu	mbian B	ronzed		
For Check, No	os		1	2	3
No. 25-Over	head Bracket	Each,	\$0.95	1.05	1.20
	er Bracket			1.75	2.00
	Bracket			1.35	1.75
	lar Top Bracke			2.55	3.10
For Check, No	os		4	5	6
	head Bracket		\$1.45	2.00	2.15
	er Bracket			3.05	3.25
	Bracket			2.40	2.55
	lar Top Bracke			3.65	3.85
In Orderin	g State the Nur	nber of	Bracket	and N	umber

of Check with which the Bracket is to be Used.
One in a Package, with Screws.

# DOOR CLOSERS

TAIN OUR

The essential mechanism of the Yale Door Closer comprises a powerful coiled spring, (which furnishes the motive power to close the door) and a piston working in a metallic cylinder against the pressure of a non-freezing liquid (which furnishes the checking or controlling resistance).

Can be used either right or left hand by reversing the arm without reversing the coil spring.

Albana.	Twee	Chala	Bronzed
3 (1.54)	iron.	4 443 63	EFFORZEG

37	71 P. C V 71-b. f. (4. f)	Each
No.	71—For Screen or Very Light Inside Doors, Weight Each 5 1/2 Lbss	6.20
No.	72-For Light Inside Doors, Weight Each 8	
	Lbs	8.10
No.	73-For Inside Doors of Medium Size, Weight	
	Each 10 1/4 Lbs	9.60
No.	74-For Heavy Inside or Ordinary Outside	
	Doors, Weight Each 13 1/2 Lbs	11.50
No.	75-For Heavy Outside Doors, Weight Each	
	17 ¼ Lbs	15.30

If Doors are Unusually Heavy or Very Strong Draughts are to be Encountered, Use One Size Larger than Specified.

Under certain conditions it is deemed advisable not to install a Closer which may be regulated by unauthorized persons. In such cases Yale Door Closers may be obtained with a Special Key Regulator, which may be removed from the Closer.

One in a Box.

# DOOR CLOSER BRACKETS







Corner Bracket.

Soffit Bracket.

Flush Bracket.

#### Cast Iron, Gold Bronzed.

For Checks, Nos	71	72	73	74	75
Corner Bracket Each,	80.95	1.30	1.40	1.85	2 25
Soffit Bracket Each.	.70	. 80	.90	1.10	1.40
Flush Bracket Each,	. 90	. 95	1.30	1.40	1.75

In Ordering Specify Both Type of Bracket and Number of Door Closer.

Open Stock.

# EXTRA SPRINGS

#### FOR CORBIN LIQUID DOOR CHECKS



Nos	139-1	139-2	139-3	139-4	139-5	139-6
For Check, Nos Each	1 \$1.00	$\frac{2}{1.25}$	3 1.65	2.10	3.15	4.00
Lawrence Control of the Control of t						

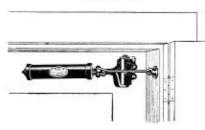
# FOR YALE LIQUID DOOR CLOSERS

Nos	319-71	319-72	319-73	319-74	319-75 75
For Check, Nos	71	72	7.3	74	
Each	\$1.15	1.15	1.35	1.70	2:50

Open Stock.

# SCREEN DOOR CHECKS

LARIMER

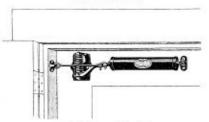


#### **Dull Brass Finish**

Each

No. 2A—For Screen, Storm and Other Light Doors. . \$2.25 Weight Each 2 1/2 Pounds.

One in a Box.



#### **Dull Brass Finish**

Fits in 2 in. Space Between Doors.

Each

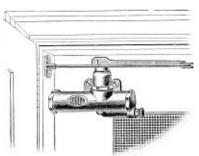
Each

No. 3A-For Screen, Storm and Other Light Doors. . \$2.00

This check was designed and built to fill the demand for a door check that can be used in a space of only 2 in. between doors.

> Weight Each 2 Pounds. One in a Box.

#### CORBIN



Cast Iron

No. 01—Columbian Bronzed......\$4.60

Right or left hand without change, requires only 3 in. space between doors and can be applied to top rail as narrow as 3½ in.

Weight Each 4 Pounds. One in a Box, with Screws.

#### NO-SLAM



No. 1-Rubber Ball, Nickel Plated Trimmings..... \$0.34

This is an automatic check for screen doors which can be applied to any screen door in connection with any spring or spring hinge.

> Weight Per Box 2 Pounds. Ten in a Box, with Screws.

# SCREEN DOOR CHECKS



No. 2—Moulded Rubber Bumper,

Tapered to Give the Greatest Amount of Spring........\$1.40 Checks the door 3 in. from closing

Weight Per Dozen 1 Pound. One Dozen in a Box.

# DOOR SPRINGS

PERFECTION

Hook Ends, Coned Pattern, Japanned

Nos.	Size Wire, Nos.	Outside Diam., Inches	Length Over All, Inches	Weight Gross, Lbs.	Per Gross
11	19	11	16 %	15	\$4.00
12	19	12	16 %	21	4.50
13	17 1/2	44	1636	27	5.00
14	16 1/6	34	16%	33	5.50
15	16	7.	16 1/2	39	6.50
16	15 1/6	1/2	161/2	48	8.00

One Dozen in a Box, with Screw Eyes.

#### VICTOR



Crucible Steel Spring, Malleable Iron Fixtures, Coppered Each

No. 170—9 in. Long, ¾ in. Diameter Spring, for Light Screen Doors, Weight Each ¾ Lbs.....\$0.22 No. 171—10 in. Long, ¾ in. Diameter Spring, for

Ordinary Screen Doors, Weight Each ½ Lb.... 28
No. 172—11 in. Long, 1% in. Diameter Spring, for
Medium Weight Doors, Weight Each % Lb.... 34



Ten in a Box, with Screws. SPRING HINGES

SINGLE ACTING Wrought Steel

No. 3—3 in. Flanges, Walnut Bronzed ......\$4.30

#### DOUBLE ACTING

Wrought Steel

No. 13—3 in. Flanges, Walnut Bronzed....... \$ 8.65

Wrought Brass No. 413—3 in. Flanges, Nat-

One Dozen Pairs in a Box.



# SPRING HINGES SHOW CASE AND CABINET



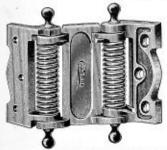
#### Wrought Steel

Wrought Brass

No. 6—2 in. Flanges, Natural Color . . . . . . . . . . . . . . . . 5.05

Weight Per Dozen Pairs 2 Pounds. One Dozen Pairs in a Box.

#### DOUBLE ACTING



#### Cast Iron, Oil Tempered Springs

Per Dozen Pairs

No. 630J—Japanned,
for Doors 1 or 1 1/8
in, Thick ......\$4.50

Weight Per Dozen Pairs 18

Pounds.

Five-twelfth Dozen Pairs in a Carton.

# SCREEN DOOR HINGES



#### CHAMPION

Wrought Steel, Planished, Loose Pin

No. 7-11—3x2 ¼ in., Japanned .......\$2.00

Weight Per Dozen Pairs 4½ Pounds.

Five-sixth Dozen Pairs in a Carton.



## CHAMPION HOLDBACK

Cast Iron

Per Dozen Pairs No. 600—3x2 in., Japanned.\$1.50

Weight Per Dozen Pairs 8 1/4 Pounds.

Five-twelfth Dozen Pairs in a Carton.

#### BOMMER



# Wrought Steel, Detachable

Size 2 % x2 % in.

Per Dozen Pairs

No. 960—Japanned . . . . . \$5.90

No. 962—Antique Copper . . . 9.50

No. 963—Dull Brass . . . 9.50

No. 964—Nickel Plated . . . 10.50

To detach, open the door and push the end of the spring down into the hook on the barrel, and withdraw the pin.

Weight Per Dozen Pairs 8 Pounds.
One Dozen Pairs in a Box; Japanned without Screws, Others with Screws.

# SCREEN DOOR HINGES

BOMMER



#### Wrought Steel

Size 2 % x 2 % in.

Per Dozen Pairs
No. 900—Japanned ....\$ 6.20
No. 902—Antique Copper . 10.10
No. 903—Dull Brass ... . 10.10
No. 904—Nickel Plated ... 11.20

Weight Per Dozen Pairs 7½ Pounds.

One Dozen Pairs in a Box; Japanned without Screws, Others, with Screws.



# Wrought Steel, Half Surface

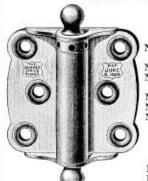
Size 2 % x2 % in.

One leaf is fastened to the casing, the other is fastened to the surface of the door.

Weight Per Dozen Pairs 8 Pounds.

One Dozen Pairs in a Box; Japanned without Screws, Others with Screws.

#### BOMMER ADJUSTABLE TENSION



#### Wrought Steel, Heavy

Size 3x3 in.

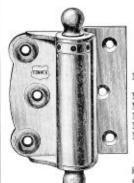
Per Pair

#### Wrought Bronze Size 3x3 in.

No. 2110—Polished Bronze 5.20 No. 2113—Nickel Plated.. 5.80

The tension of the spring can be regulated after the hinge is applied to the door.

Weight Per Pair 11/4 Pounds. One Pair in a Box, with Screws.



#### Wrought Steel, Heavy, Half Surface

Size 3x3 in.

Per Pair
No. 2200—Japanned De a d
Black ... \$1.90
No. 2201—Bronze Plated ... 2.50
No. 2202—Antique Copper ... 2.50
No. 2203—Dull Brass ... 2.50
No. 2204—Nickel Plated ... 3.30
No. 2205—Sand Blast Finish ... 3.30

One leaf is fastened to the casing, the other to the surface of the door.

Weight Per Pair 14 Pounds. One Pair in a Box, with Screws.

# SCREEN DOOR SETS



	Wrought Steel, Loose Pin Butts with Ball Tips Per Dozen Sets
No.	1750J       —Japanned Finish       \$7.10         1750F       —Dull Brass Finish       \$.35         1750D2—Antique Copper Finish       \$.35
	Contents of Set

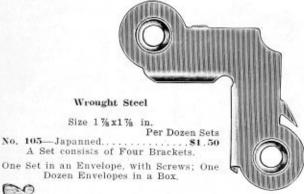
One Pair No. 1751, 3x3 in. Wrought Steel Ornamental Loose Pin Butts.

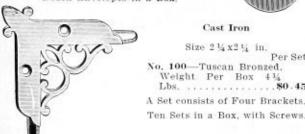
One No. 479, 47% in. Wrought Steel Pull.

One No. 3 Wire Spring. One 2½ in. Hook and Eye.

The butts in this set are applied to the surface of the door and casing. The loose pins allow door to be taken off. Weight Per Dozen Sets 11 % Pounds. One Set in a Box, with Screws.

# SCREEN BRACKETS





Pieces.

#### Cast Iron

Size 2 1/4 x 2 1/4 in. Per Set No. 100-Tuscan Bronzed, Weight Per Box 41/4 A Set consists of Four Brackets.

# SCREEN DOOR BRACKETS

Cast Iron

Size 3 1/2 x 3 1/2 in.

No. 202-Tuscan Bronzed, Weight Per Box 7 % Lbs. . \$1.00 A Set consists of Four Corner Brackets and Two Center

Per Set

Five Sets in a Box, with Screws.

# SCREEN DOOR BRACES



Brass Plated Rod, Japanned Clips

Per Dozen No. 532—12 in., Weight Per Dozen  $2\frac{1}{12}$  Pounds....\$1.45 No. 533—18 in., Weight Per Dozen  $2\frac{1}{12}$  Pounds.... 1.50One Dozen in a Box, with Screws.

# SLIDING WINDOW SCREEN SPRINGS



# Tempered Steel

For Sliding Window Screens. Per Gross No. 12—¼ x4 in ..... .... \$2.00 One Gross in a Box.

# STORM SASH AND SCREEN HANGERS





#### Wrought Steel

Width of Hook Plate 2 % in., Length of Eye Plate 3 in. For Full Length Screens or Storm Sash.

Per Dozen Sets Set consists of Two Hooks and Two Eyes. Weight Per Dozen Sets 2 % Pounds. One Dozen Sets in a Box, with Screws.

# SUMMER DOOR HANGERS



#### Wrought Steel

Per Dozen Sets No. 1917 — 2 % in., Single Hook, Wt. Dozen Sets 9 Lbs. \$5.00

No. 1917 — 6 in., Double Hook, Wt. Dozen Sets 19 Lbs. . . . . . . . . 12.00

Style of 2 % in.

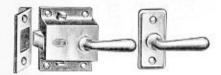
Cuts Show One-quarter Set of each Number:

One-half Dozen Sets in a Package.



Style of 6 in.

# SCREEN DOOR CATCHES



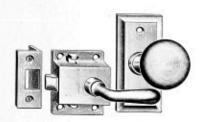
#### Cast Iron

Catch 2 1/4 x1 % in., for Doors % to 1 % in. Thick, Opening Out.

											r Doze	
No.	Y3450-	-Amber	Fin	ish .				 			.85.5	55
No.		-Antiqu	e Co	pper		2000		 		 	. 6.6	35
No.	EA3450-	-Dull B	rass,	Nati	iral	Col	or	 	+	 	. 6.6	55

Weight Per Dozen 634 Pounds.

One-half Dozen in a Box, with Screws.

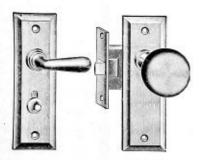


#### Cast Iron, Wrought Steel Knob and Escutcheon

Catch  $2\frac{1}{4}x1\frac{\pi}{8}$  in., Knob  $1\frac{\pi}{4}$  in., Escutcheon  $4\frac{\pi}{4}x1\frac{\pi}{4}$  in., for Doors  $\frac{\pi}{8}$  to  $1\frac{\pi}{8}$  in. Thick, Opening Out.

		Per Dozen
No.	R03463—Anique Copper	\$10.65
No.	EA03463—Dull Brass, Natural Color	10 . 65

Weight Per Dozen 10 1/2 Pounds. One in a Box, with Screws.



#### Cast Iron, Wrought Steel Knob and Escutcheons

	Per D	ozen
No.	R03457—Antique Copper, Polished	. 35
No.	EA03457—Dull Brass, Natural Color 13	. 35
	Weight Per Dozen 111/4 Pounds.	

#### Cast Bronze, Wrought Bronze Knob and Escutcheon

		Per Dozen
No.	R02457-Antique Copper, Polished	824.00
No.	EA02457-Dull Brass, Natural Color	24.00
No.	A02457—Polished Brass	24.00
No.	SKA02457-Sanded Brass, Oxidized and	Re-
	lieved	26.65

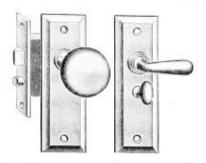
#### Weight Per Dozen 12 Pounds.

Description—2x2x¼ in, Case, 1¼ in. Backset, 3¼ in. Front, Reversible, ¼ in. Hub, 1¾ in. Knob, 2 in. Lever, 4¾x 1½ in. Escutcheons, for Doors ¾ to 1¾ in. Thick.

Operated-By Knob from Outside and Lever Inside, Knob and Lever Locked by Slide Stop Inside.

One in a Box, with Screws.

# SCREEN DOOR CATCHES



Cast Bronze Front and Bolt, Cast Iron Lever, Wrought Steel Knob and Escutcheon

 No.
 R03459—Antique Copper, Polished
 Per Dozen

 No.
 EA03459—Dull Brass, Natural Color
 22.65

Weight Per Dozen 111/2 Pounds.

Cast Bronze Front and Bolt, Cast Bronze Lever, Wrought Bronze Knob and Escutcheon

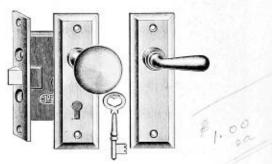
Weight Per Dozen 12 Pounds.

Description—2x1 ¾ x ½ in. Case, 1 ¼ in. Backset, 3 ¼ x ½ in. Front, Reversible, ¼ in. Hub, 1 ¾ in. Knob, 2 in. Lever, 4 ¾ x1 ½ in. Escutcheons, for Doors ½ to 1 ¾ in. Thick.

Operated—Latch Bolt by Knob from Outside and Lever Inside, Dead Bolt by Thumb Knob from Inside.

One in a Box, with Screws.

# SCREEN DOOR LOCKS



Cast Bronze, Wrought Bronze Knob and Escutcheons
Per Dozen

Description—3x2¼x½ in. Case, 1 % in. Backset, 4 %x½ in. Front, Reversible, ½ in. Hub, 1 ¾ in. Knob, 4 ¾x1½ in. Escutcheons, 2 Nickel Plated Steel Keys, for Doors % to 1 % in. Thick.

Operated—By Knob from Outside and Lever Inside, and by Key from Outside at All Times. Outside Knob May be Locked by Stop in Face of Lock.

Weight Per Dozen 1414 Pounds.

One in a Box, with Screws.

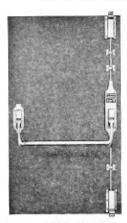
# VON DUPRIN SELF-RELEASING EXIT DEVICES

#### TYPE B

For exit doors from auditoriums, schools, factories, or any building where people gather in large numbers.

They permit of ready exit at all times by pressure either up or down on the cross bar.

All parts are solid brass or bronze.



No. 1127—Inside View.



No. 1127—Edge of Door.



No. 1123. Knob and Escutcheon.



No. 1123—Edge of Door.

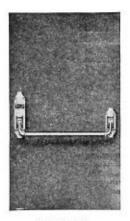


No. 1123—Inside View.

#### Furnished in Polished Brass or Polished Bronze Finishes Each

No. 1127—For Standing Door of Double Entrance Doors, or Both Doors of Exit Doors, No Outside Hardware, Shipping Weight Per Set 28 Lbs....\$35.00

# Furnished in Polished Brass or Polished Bronze Finishes Each



No. 1724. Inside View.



Nos. 1724 and 1124. Edge of Door.



Nos. 1722 and 1122. Edge of Door.



Nos. 1141 and 1142. Edge of Door.



No. 1129-R. Edge of Door.

#### Furnished in Polished Brass or Polished Bronze Finishes.

Each No. 1724-For Active Door of Double Entrance Doors, Has Grip and Thumb Piece and Cylinder Outside Control, Shipping Weight Per Set 28 Lbs..... No. 1722-For Active Door of Double Entrance Doors, Has Knob and Escutcheon, Cylinder Outside Control, Shipping Weight Per Set 28 Lbs..... No. 1124-For Single Entrance Doors, Has Grip and Thumb Piece and Cylinder Outside Control, Shipping Weight Per Set 28 Lbs... 37.65 No. 1122-For Single Entrance Door, Has Knob and Escutcheon, Cylinder Outside Control, Shipping Weight Per Set 28 Lbs. . . No. 1141-For Single Entrance Door, No Outside Hardware, Cylinder Outside Control, Shipping Weight Per Set 24 Lbs..... 33.15 No. 1142-For Active Door of Double Entrance Doors, No Outside Hardware, Cylinder Outside Control, Shipping Weight Per Set 24 Lbs..... 33.35 No. 1129-R—For Single Fire Escape Door, No Outside Hardware ..... 22.80

Note-Polished Brass will be sent unless otherwise ordered.

# No. 5127—Inside No. 512

# VON DUPRIN SELF-RELEASING EXIT DEVICES

#### TYPE D

A competitive device, strong and durable and an excellent value for the price.

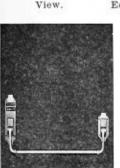
All parts are solid brass or bronze, and the locks are same as used with Type B Devices.

Operated at all times from inside by pressure against the cross bar.

#### Furnished in Polished Brass or Polished Bronze Finish

Each

No. 5127—For Standing Door of Double Entrance Doors, or Both Doors of Exit Doors, No Outside Hardware, Shipping Weight Per Set 25 Lbs. . \$26.40



No. 5127— Edge of Door.









Edge of Door. No. 5724-Inside Each Furnished in Polished Brass or Polished Bronze Finish View. No. 5724-For Active Door of Double Entrance Door, has Grip and Thumb Piece and Cylinder Outside Control, \$29.65 Shipping Weight Per Set 25 Lbs..... No. 5722-For Active Door of Double Entrance Door, has Knob and Escutcheon and Cylinder Outside Control, 29.65 Shipping Weight Per Set 26 Lbs..... No. 5124-For Single Entrance Door, has Grip and Thumb Piece and Cylinder Outside Control, Shipping Weight 29.65 Per Set 25 Lbs...... No. 5122-For Single Entrance Door, has Knob and Escutcheon and Cylinder Outside Control, Shipping Weight 29.65 Per Set 26 Lbs.... 5141-For Single Entrance Door, No Outside Hardware, Cylinder Outside Control and Night Latch Action, 25.35 Shipping Weight Per Set 22 Lbs..... No. 5142-For Active Door of Double Entrance Door, has No Outside Hardware, Cylinder Outside Control and Night Latch Action, Shipping Weight Per Set 22 Lbs.... 15.50 No. 5129-R-For Single Fire Escape Door, No Outside Hardware ..... Note-Polished Brass will be sent unless otherwise ordered.



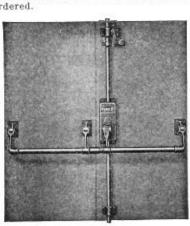
TYPE F

# Unpolished Iron, Part Malleable and Grey Iron

Operated at all times from inside by pressure against the cross bar.

#### Furnished in Dead Black Finish

No. 350—For Double Exit Doors, No Outside Hardware, Shipping Weight Per Set 44 Lbs. 13.00



No. 350-Inside View.

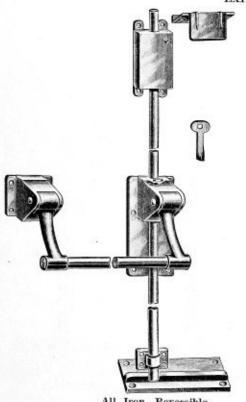
No. 340-Inside View.

# CORBIN AUTOMATIC EXIT FIXTURES

These fixtures provide a ready exit at all times, as the doors to which they are applied can always be opened from the inside, even when locked against entrance. They yield to a light pressure, so that a child can operate them with ease.

Originally designed as a preventive of loss of life through panics, their use has become popular upon buildings of all kinds where people congregate, including theaters, schools, churches, office and public buildings, loft buildings and factories. They are applied to doors opening outward. Full instructions accompany each fixture.

#### EXIT BOLTS, WITH PUSH BAR



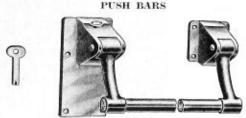
All Iron, Reversible

Bolt Rods % in. Diameter, Horizontal Bar ¾ in. Tubing, Brackets 2 %x5 % in. and 2 %x2 ½ in., Top Box 2 %x5 ¼ in., Top Strike with Return for Stop ½ in. Thick. For Doors 8 ft. 6 in. High x 3 ft. Wide, Height of Bar from Floor 38 in. Requires Stile at Least 31/2 in. Wide.

Operation-Pressure on the horizontal bar automatically retracts bolts at top and bottom, in which position they are held as long as the door is open. When the door closes, the bolts are automatically projected into the strikes, except when they are locked in retracted position by means of the key.

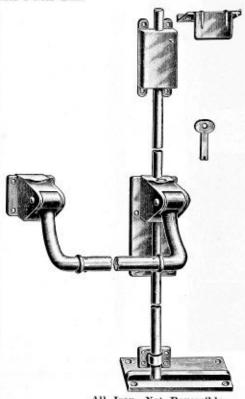
Note-These bolts can be fitted to a door of any height under 8 ft. 6 in. x 3 ft. by sawing off the end of the top bolt and horizontal bar to the required length.

# Weight Each 14 Pounds.



All Iron, Reversible

Same Bar as Used on Above Bolt. Each No. G03357 1/2 - Electro-Galvanized .\$13.35 Weight Each 7 Pounds.



All Iron, Not Reversible

Bolt Rods & in. Diameter, Horizontal Bar 1 in. Tubing, Brackets 2 % x5 % in. and 2 % x2 ½ in., Top Box 2 % x5 ¼ in., Top Strike with Return for Stop ½ in. Thick. 

Operation-Pressure on the horizontal bar automatically retracts bolt at top and bottom, in which position they are held as long as the door is open. When the door closes, the bolts are automatically projected into the strikes, except when they are locked in retracted position by means of the key.

Note-In ordering, give hand of door, height of door between threshold and stop, width of door between stops, width of stile, and thickness of stops.

Weight Each 14 Pounds.



All Iron, Not Reversible

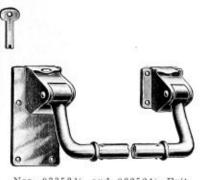
Same Bar as Used on Above Bolt, Each No. G03352½—Electro-Galvanized ..... .813.35 In ordering, give hand of door, width of door between stops, width of stile and thickness of stops.

Weight Each 7 Pounds.

# CORBIN AUTOMATIC EXIT FIXTURES

SETS FOR SINGLE DOORS

Complete with Lock or Latch



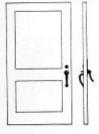
Nos. 033521/2 and 023521/2 Exit Bar for Inside.



No. 75282 Handle for Outside.



Nos. 1519 1/2 PY Knob and 4440 1/4 PY Escutcheon for Outside.



Outside View Showing No. 75282 Handle.

# WITH SECTIONAL HANDLE OUTSIDE

Operated-From Inside by Slight Pressure on Bar, from Outside by Key and Sectional Handle.

- No. B33386—Lock No. 1386, Cast Bronze Front and Bolts, No. 03352½ Exit Bar, All Iron Dead Black Finish, No. 75282 Sectional Handle Cast Bronze, Polished, Weight Per Set 13 Lbs......\$40.75
- No. B42386-Lock No. 1386, Cast Bronze Front and Bolts, No. 02352 1/2 Exit Bar All Bronze, No. 36884 Sectional Handle Cast Bronze, Polished, Weight Per Set 13 Lbs. . 46.75



Outside View Showing Knob and Escutcheon.

# WITH KNOB AND ESCUTCHEON OUTSIDE

Operated-From Inside by Slight Pressure on Bar, from Outside by Key and Knob.

Per Set No. B33387—Lock No. 1387, Cast Bronze Front and Bolts, No. 03352½ Exit Bar All Iron, Dead Black Finish, No. 1519½PY Knob and No. 4440¼PY Escuecheon, Cast Bronze, Polished, Weight Per Set 12 % Lbs.... ......

No. B42387—Lock No. 1387, Cast Bronze Front and Bolts, No. 02352 ½ Exit Bar All Bronze, No. 1519 ½ PY Knob and No. 74029 ½ PY Escuecheon, Cast Bronze, Polished, Weight Per Set 12 % Lbs...... 46.60



WITHOUT OUTSIDE TRIM

Operated-From Inside by Slight Pressure on Bar, No Trim on Outside.

No. B33376-Latch No. 0176, Cast Bronze Front and Bolt, No. 033521/2 Exit Bar All Note-All above furnished in any prevailing finish. Extra charge for Special Finishes.

Inside View Showing No. 033521/2 Type Exit Bar.

EXIT BAR

Horizontal Bar 1 in. Tubing, Brackets 2 % x5 % in., and 2 % x2 ½ in. Requires stile at least 4½ in. wide. Pressure on the horizontal bar automatically retracts the latch bolt of the lock, allowing the door to be opened at all times from the inside. The latch bolt can be held in retracted position by means of the key.

Not Reversible. In ordering, give Hand of Door, Width of Door between stops, Width of Stile and Thickness of Stop, also Thickness of Door.

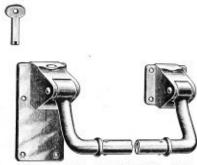
Packed with Screws.

# CORBIN AUTOMATIC EXIT FIXTURES

SETS FOR PAIR OF DOORS

Complete with Lock or Latch





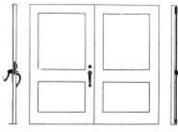
Nos. 03352½ and 02352½ Exit Bar for Inside.



No. 75282 Handle for Outside.



Nos. 1519 ½ PY Knob and 4440 ¼ PY Escutcheon for Outside.



Outside View Showing No. 75282 Handle.

#### WITH SECTIONAL HANDLE OUTSIDE

Operated—From Inside by Slight Pressure on Bar, from Outside by Key and Sectional Handle.

Per Set



Outside View Showing Knob and Escutcheon.

#### WITH KNOB AND ESCUTCHEON OUTSIDE

Operated-From Inside by Slight Pressure on Bar, from Outside by Key and Knob.

No. B33487—Lock No. 1387, Cast Bronze Front and Bolts, No. 03352½ Exit Bar All Iron, Dead Black Finish, No. 1519½PY Knob and 'No. 74029½PY Escutcheon, Cast Bronze, Polished, Wt. Per Set 26½ Lbs. \$59.95



Operated-From Inside by Slight Pressure on Bar, No Trim on Outside,

No. B33476—Latch No. 0176, Cast Bronze Front and Bolt, No. 03352 ½

Exit Bar All Iron, Dead Black Finish, Weight Per Set 22½ Lbs......\$39.80

Note—All above furnished in any prevailing finish. Extra charge for Special Finishes.



Inside View Showing No. 033521/2 Type Exit Bar.

# EXIT BAR

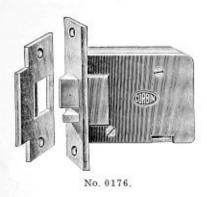
Horizontal Bar 1 in. Tubing, Brackets 27%x5% in. and 27%x2½ in. require Stiles at least 4½ in. wide. Pressure on the horizontal bar automatically retracts the latch bolt of the lock, allowing the door to be opened at all times from the inside. The latch bolt can be held in retracted position by means of the key.

Not Reversible. In ordering, give Hand of Door, Width of Door between Stops, Width of Stile and Thickness of Stop, also Thickness of Door,

These Sets are regularly furnished with open back strike, which allows the doors to open and close independently of each other.

Packed with Screws.

# MORTISE EXIT DOOR LATCHES



#### FOR CORBIN AUTOMATIC EXIT FIXTURES

	Each
No.	B0176—Polished Bronze,\$4.50
No.	EA0176—Dull Brass, Natural Color
No.	A0176—Polished Brass
No.	SKA0176—Sanded Brass, Oxidized and Relieved 4.70

Description—3 % x3x % in. Japanned Iron Case, Strike Lip to Center 1 ½ in., Backset 2 ¾ in., Cast Bronze Front 5x1 ½ in., Cast Bronze Bolts, Easy Spring Latch Bolt, Reversible.

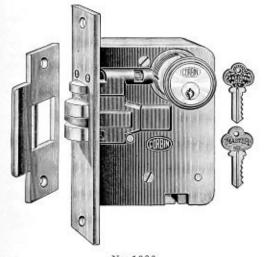
Operated—By Exit Bar Push Lever from the Inside Only, at All Times, Auxiliary Latch Automatically Locks Latch Bolt, so that it Cannot be Forced Back when the Door is Closed, but Does Not Prevent Exit Bar from Operating Latch Bolt.

Weight Each 11/2 Pounds.

One in a Box, with Screws.

# MORTISE EXIT DOOR LOCKS

CORBIN BALL BEARING CYLINDER FOR ENTRANCE DOORS OPENING OUT



No. 1386.

	I I	acn
No.	B1386—Polished Bronze	.80
	EA1386—Dull Brass, Natural Color 20	.80
No.	A1386—Polished Brass	.80
No.	SKA1386-Sanded Brass, Oxidized and Relieved 21	.00

Description—5%x4%x% in. Japanned Iron Case, Strike Lip to Center 1½ in., Backset 2% in., Cast Bronze Front 7%x1¼ in., Cast Bronze Bolts, Anti-friction Latch Bolt, Not Reversible, 2 Cast Bronze Cylinders, 3 Nickel Silver Keys, Changes Unlimited.

Operated—By Exit Bar or Push Lever from the Inside at All Times, and by Thumb Piece from the Outside. Outside Thumb Piece May be Set by Turn of Key in Inside Cylinder, when so Locked Against Thumb Latch Outside, Entrance May be Had by Turning Key in Outside Cylinders, which Retracts the Latch Bolt, but Does Not Release the Thumb Latch. Auxiliary Latch Automatically Locks Latch Bolt, so that it Cannot be Forced Back when the Door is Closed, but Does Not Prevent Key Exit Bar or Thumb Piece from Operating Latch Bolt.

Weight Each 4% Pounds.

One in a Box, with Screws.



	Each
No.	B1387—Polished Bronze820.80
No.	EA1387—Dull Brass, Natural Color 20.80
No.	A1387—Polished Brass
No.	SKA1387-Sanded Brass, Oxidized and Relieved 21.00

Description—5 % x4 ½ x ¾ in. Japanned Iron Case, Strike Lip to Center 1½ in., Backset 2¾ in., Cast Bronze Front 7 ¾ x1 ¼ in., Cast Bronze Bolts, Anti-friction Latch Bolt, Hub ¼ in., Not Reversible, 2 Cast Bronze Cylinders, 3 Nickel Silver Keys, Changes Unlimited.

Operated—By Exit Bar or Push Lever from the Inside at All Times, and by Knob from the Outside. Outside Knob May be Set by Turn of Key in Inside Cylinder, when so Locked Against Knob Outside. Entrance May be Had by Turning Key in Outside Cylinder, which Extracts the Latch Bolt, but Does Not Release the Knob. Auxiliary Latch Automatically Locks Latch Bolt, so that it Cannot be Forced Back when the Door is Closed, but Does Not Prevent Key, Exit Bar or Knob from Operating Latch Bolt.

Weight Each 4% Pounds.

One in a Box, with Screws.

Note-When Ordering, State Hand and Thickness of Door. State whether for Single or Double Doors.

# DOOR HOLDERS

ARISTOCRAT



	Cast			onze, Polis	shed	Each	
No.	01-For	Doors	24, 26	or 28 in.	Wide	\$10.00	
No.	02-For	Doors	30 in.	Wide and	Over	10.00	

The Aristocrat Overhead Door Holder can be installed to hold door open at 90 or 125 degrees. A positive lock in the discs holds the door securely open under any condition. A shock absorber eliminates the shock and strain on the hinges. When not in use, by placing the locking handle in a neutral position the device will operate freely as the door opens and closes. Can be used on either right or left hand door.

Note-Brushed or Sand Blast Finishes furnished at same price. Special Plated Finishes 10 % extra.

Two in a Carton.



#### REPORTES

Cast Bronze, Polished, Rubber Tip

Each No. 4-4 in, High.....\$2,00 No. 5-5 in. High..... 2.00

Easily operated, merely push the arm down or raise it with the foot. Only the tough cor-rugated rubber foot comes in contact with the floor. Will not mar or mark the finest floor.

Note-Brushed or Sand Blast Finishes at same price. Special Plated Finishes 10% extra. Six in a Carton.

. . . . . . . . . . . . . . 8 . 00

#### CORBIN

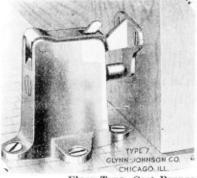
	O'DETECT!	
	Cast Iron, Rubber Tip 7 % x2 % in., 1 % in. Throw	Marine
	No. Each	
	B3860—Bronze Plated\$1.55	
	R3860-Antique Copper., 1.55	10 10 10 10 10 10 10 10 10 10 10 10 10 1
	EA3860—Dull Brass 1.55	I BITTER
	SKA3860-S anded Brass,	12112
	Oxidized and Relieved 1.65	
	Cast Bronze, Rubber Tip 7 % x2 % in., 1 % in. Throw	TRE
	No. Each	3 3 2 2 2 2
	B2860—Polished Bronze\$4.00	5 3 W 688
	R2860-Antique Copper.	1800
	polished 4.00	4 <b>38</b> 600
	EA2860—Dull Brass, Natural	1 多數以降
	Color 4 . 00	1. 計畫 班面
3)	A2860—Polished Brass 4.00	1 日本 公司
	F2860—Genuine Rustless	3 概 3 2
	Iron 3.00	100
	Weight Per Dozen 91/2 Pounds.	10
	Three in a Box, with Screws.	122 CO 122
0	CLIDERIA GIRLIONG	Nos. 30
0.	CALDWELL "JUNIOR" Size 5x1 in.	to 304.

01 Nos. 386 and 2866 Gray Iron No. 303 -Polished Bronze No. 30316-Antique Copper, Polished..... Cast Bronze No. 304-Polished Bronze ...... 8.00

> Weight Per Dozen 5 Pounds. One Dozen in a Box, with Screws.

No. 304-Dull Brass . . . .

# DOOR STOPS AND HOLDERS RAWLINGS AUTOMATIC



Rawlings Automatic Door Holders hold the door open absolutely secure and noiseless under all conditions. They engage the door automatically and release by quickly pushing the door backwards against the holder. The automatic plunger takes up all the lost motion and prevents rattles.

	Polished		
SF1 SF2	*F5	F6	F7
1/2 2 5/8	2	3	3 1/2
1/2 2 5/8	2 7/8	3	2 7/8
5/8 3 3/8	3 34	4 1/8	4 1/8
2 3	2	3	4
.50 3.50	3.00	4.00	5.00
֡	1½ 2 % ½ 2 % 5% 3 % 2 3 2.50 3.50	1.½ 2.5% 2 1½ 2.5% 2.7% 15% 3.3% 3.¼ 2 3 2 2.50 3.50 3.00	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

\*Nos. SF1 and F5 require base mounting blocks. Brushed or Sand Blast Finishes furnished at same price. Special Plated Finishes 10% extra. No. SF1, Eight; Nos. SF2, F5 and F6, Six; No. F7,

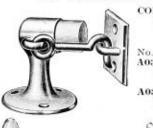
Four in a Carton.



Wall Type, Cast Bronze, Polished No. W1-1 % in. High, 2 1/4 in. Wide, 2 3/4 in. Long, 2 Point Anchorage .....

Special Plated Finishes 10 % extra.

No. W1, Eight; No. W2, Six in a Carton.



#### CORBIN

Cast Bronze, Rubber Tip Height 3 ¼ in. With Wood Screws

Each A0370—Polished Brass...\$3.65 Weight Each 1 1/4 Pounds. With Expansion Bolt A0370 1/2 - Polished Brass. 4.00 Weight Each 11/2 Pounds.

Six in a Box.



Cast Bronze, Rubber Tip 3 % in. Projection. With Wood Screws Each

No. A0369-Polished Brass ........\$3.10 Weight Each 1 Pound.

With Expansion Bolt Six in a Box.



Type of Expansion Bolt Used with Door Stops where specified.

DOOD STORE	JOSEPH WOOD
DOOR STOPS	AND HOLDERS
10	Cast Iron, Wrought Steel Holder
-	2 % in. Projection.
. R0361 14 -Antique Copp	Per Dozen d \$ 4.25 per 4.25 ozen 2 ¼ Pounds.
	ought Bronze Holder
. A361½—Polished Brass Weight Per I	Projection.  S
	Cast Bronze, Wrought Bronze Holder
1	Height 1% in.
Weight Per De	Per Dozen  No. A361 — Polished Brass\$14.00  ozen 4 34 Pounds. Box, With Screws.
	STOPS
1	Cast Iron, Rubber Tip
inic .	3 ¼ in. Projection.
BO365—Antique Cop EA0365—Dull Brass SKA0365—Sanded Bras E0365—Nickel Plate	Per Dozen \$2.40 
Cast Bronz	e, Rubber Tip
Weight Per 1	Projection. Per Dozen stural Color
	Cast Iron, Rubber Tip 2 % in. Projection.
. EA362—Dull Brass SKA362—Sanded Brass Weight Per D	er \$1.05
. EA362—Dull Brass SKA362—Sanded Brass Weight Per D	Per Dozen \$1.05 1.05 Oxidized and Relieved. 1.20 ozen 1¼ Pounds.



Wrought Steel, Rubber Tip	
3 in. Projection.	Per 100
No. 3410B -Antique Copper	\$12.25
No. 3410C -Dull Brass	12.25
No. 3410SK-Sanded Brass, Antique Light	13.75
No. 3410N -Nickel Plated	13.75
Weight Per Box 11/2 Pounds.	
Ten in a Box.	



	Natural Wood, Rubber Tip, Iron Screw	7
	2 1/2 in. Projection.	Per Dozen
No.	111-Maple, Common Polish	\$0.60
	Weight Per Dozen 11/2 Pounds.	
	Three Dozen in a Box.	

# DOOR STOPS



Cast Bronze, Rubber Tip 3% in. Projection.

With Wood Screws

Each No. EA369—Dull Brass, Nat-.... \$1.65

With Expansion Bolt Each A369 1/2 — Dull Brass, Natural Color..... 2.00 Weight Each % Pound. Six in a Box.



Cast Bronze, Rubber Tip

Height 314 in. With Wood Screws

Each No. EA370-Dull Brass, Natural Color 

With Expansion Bolt No. EA370 1/2 - Dull Brass, Natural

Color ..... 1.75 Weight Each 1 1/2 Pounds.

Six in a Box.



Type of Expansion Bolt furnished with Door Stops where specified.

Cast Iron, Rubber Tip Height 23/8 in. Per Dozen No. EA0366—Dull Brass . . . . . ........\$12.00 Weight Per Dozen 4 Pounds. Cast Bronze, Rubber Tip Height 2% in.

A366-Polished Brass . . No. EA366—Dull Brass, Natural Color, 20.00 Weight Per Dozen 41/4 Pounds.

One-half Dozen in a Box.



Cast Iron, Rubber Tip Height 1% in. Per 100 No. 7610C—Dull Brass ..... No. 7610N-Nickel Plated, Planished 13.75

> Cast Bronze, Rubber Tip Height 2% in.

No. 7615C—Dull Brass, Natural Color 40.00 No. 7615N—Nickel Plated, Polished, 43.20

Weight Per Box 1 Pound. Ten in a Box, with Screws.



Wrought Bronze, Rubber Tip

Height 1% in. No. 3615B - Antique Copper, No. 36158K-Sanded Brass, Antique Light .... No. 3615N - Nickel Plated, Polished ..... 35.00

Weight Per Box 11/2 Pounds. Ten in a Box, with Screws.



Wood, Rubber Ring Per Dozen No. 134—Height 1 1/4 in . . . . . . . . . . . . . \$1.50

Weight Per Dozen % Pound.

Three Dozen in a Box.

# CREMONE BOLTS

FOR SASH OR DOORS OPENING IN OR OUT





Strike for Sash or Doors Opening In. Strike for Sash or Doors Opening Out.

Both the Above Strikes Furnished with Bolts.

Cast Bronze, Polished, with Wrought Bronze Rod and Guides

1 1/2 in. Case and Guides, 1/4 in. Half Round Rod.

Note-In ordering, state height of sash or door and distance from bottom to center of knob.

Stock size for doors is 8 ft. 6 in., with knob 3 ft. 6 in. from bottom. This size will be furnished unless otherwise specified.

Weight Each, 8½ ft. Long, 6¼ Pounds. One in a Package.





Strike for Sash or Doors Opening In. Strike for Sash or Doors Opening Out.

Each

Both the Above Strikes Furnished with Bolts.

Cast Bronze, Polished, with Wrought Bronze Rod

 $1\frac{1}{2}$  in. Case and Guides,  $\frac{6}{2}$  in. Half Round Rod.

Note—In ordering, state height of sash or door and distance from bottom to lever handle, and if for a Right or Left hand door.

Stock sizes for doors is 8 ft. 6 in., with lever handle 3 ft. 6 in. from the bottom. This size will be furnished unless otherwise specified.

Weight Each, 8 1/2 ft. Long, 6 1/4 Pounds.

One in a Package.

# SURFACE DOOR BOLTS

No. 3578-Wrought Steel

Guides 1½ in. Wide, Half Round Rod % in.
Wide.

Per Dozen
Length Wt Doz Rand FA SKA and F

		Per Dozen	
Length,	Wt. Doz.,		SKA and E
Inches	Lbs.	Finishes	Finishes
4	2 1/4	\$3.20	83.55
6	2 %	3.45	3.80
9	3 1/4	3.90	4.20
12	3 %	4.65	5.00

#### No. 1578-Wrought Bronze

Guides 1 % in. Wide, Half Round Rod % in. Wide.

		Per	Dozen
Length,	Wt. Doz.,	R and EA	SKA and E
Inches	Lbs.	Finishes	Finishes
4	2 1/4	\$6.20	86.90
6	2 34	7.20	7.80
9	3 1/2	9.35	10.20
12	4	10.65	12.80
	4 4 4 4	A 14	

12 in., One-half Dozen; Others, One Dozen in a Box, with Screws.

# SURFACE DOOR BOLTS



No. 3580 1/2 -- Wrought Steel

Guides 1% in. Wide, Half Round Rod, 1/2 in. Wide.

	Per Dozen		
Wt. Doz.,	R and EA	SKA and E	
Lbs.	Finishes	Finishes	
5	\$3.55	\$3.90	
6 1/4	4.20	4.65	
7 1/4	4.90	5.45	
9 1/4	6.20	6.90	
	Lbs. 5 6 14 7 14	Wt. Doz., R and EA Lbs. Finishes 5 \$3.55 614 4.20 734 4.90	

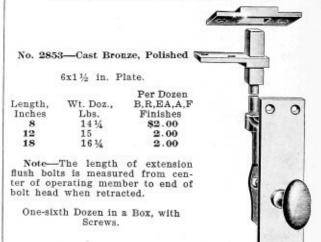
#### No. 1580 1/2 -Wrought Bronze

Guides 1% in. Wide, Half Round Rod ½ in. Wide.

		Per De	Per Dozen		
Length.	Wt. Doz.,	R and EA	SKA and E		
Inches	Lbs.	Finishes	Finishes		
6	5 34	\$9.80	\$10.80		
9	6 34	12.45	13.65		
12	8	14.20	15.65		
18	10 %	16.00	17.55		
O 48	1.3 D	in a Daw mist	Conoma		

One-third Dozen in a Box, with Screws.

# EXTENSION FLUSH BOLTS



# No. 12659—Cast Iron, Bronze Lever

5%x% in. Plate.

		Per Dozen	
Length, Inches	Wt. Doz., Lbs.	R and EA Finishes	SKA Finish
6	6	\$1.85	\$2.15
12	6 1/4	1.85	2.15
12	6 34	1.85	2.15

# No. 2659—Cast Bronze, Polished

5 % x % in. Plate.

Y		Per Dozen	
Length,	Wt. Doz.,	R and EA	SKA
Inches	Lbs.	Finishes	Finish
6	6	\$2.00	\$2.20
8	614	2.00	2.20
12	6%	2.00	2.20

Note—The length of extension flush bolts is measured from center of operating member to end of bolt head when retracted.

One-half Dozen in a Box, with Screws.



00

# EXTENSION FLUSH BOLTS



No. 12859—Cast Iron, Bronze Lever

6 % x1 % in. Plate.

Length,	Per Dozen			
	Wt. Doz.,	B, R, EA, A	SKA	
Inches	Lbs.	Finishes	Finish	
8	12 %	81.85	2.15	
12	1336	1.85	2.15	
18	14 3/4	1.85	2.15	

No. 2859—Cast Bronze, Polished

6 % x1 % in. Plate.

Length,	—— Per Dozen —			
	Wt. Doz.,	B, R, EA, A, F	SKA,E	
Inches	Lbs.	Finishes	Finish	
8	1234	\$2.00	2.20	
12	13 1/2	2.00	2.20	
18	14%	2.00	2.20	

Note-The Length of Extension Flush Bolts is measured from Center of Operating Member to End of Bolt Head when retracted.

One-sixth Dozen in a Box, with Screws.

# CABINET BOLTS



O	Cast Braz	ss, Polished	
and the same of th	Size.	Wt. Dozen,	Per
Nos.	Inches	Lbs.	Dozen
0 124	1 1/4 x 1 3/4	1 1/4	\$8.00
125	1 1/2 x 2	1 %	10.40
Three Dozen	in a Box, wi	th Screws.	

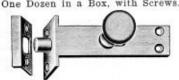
# FLUSH BOLTS



No. 133--Cast Bronze, Polished

Width 34 in.

		Per Doze	n
Length.	Wt. Dozen,	B, EA, A	E
Inches	Lbs.	Finishes	Finish
8	2 3/8	89.60	11.20
4	2 3/4	10.40	12.00
		Dor with Corows	



Cast Bronze, Polished

Size 1x4 in.	Per Dozen
No. A1399 1/2 Polished Brass	\$26.65
Weight Per Dozen 31/4 Pounds.	
One-half Dozen in a Box, with Screw	8.



Wrought Brass, Polished Steel Bolt

	No. A98—Polished Brass	
Length,	Inches	74
Per Doze	n	4.80

No. 82-3/4 x2 in., Polished Brass..... Weight Per Dozen A Pounds. Three Dozen in a Box, with Screws.

# FLUSH BOLTS



No. A109—Wrought Brass, Polished, Steel Bolt Width % in.

Length, Inc	hes												4	6
Weight Per	Dozen,	Lbs	*15			*		×	+				1 %	2 1/2
Per Dozen														9.60
	One Do	zen	in.	a	1	30	X.	1	wi	it.	h	8	crews	



No. 1026-Wrought Steel, Bright

Width 1 in., Lip Extension 1% in., % in. Square Bolt. Length, Inches... 9 12 15 Wt. Dozen, Lbs.. 5 6 1/2 8 9 1036 Per Dozen . . . . . \$10.90 12.25 13.95 15.25 16.55 6 and 9 in., One Dozen; Others, One-half Dozen in a Box.



No. 393-Wrought Steel

Width 1 1/4 in., Lip Extension 1 fg in., 1/2 in. Square Bolt. Prices Per Dozen

Length, Inches	6	9	12	18	24
Wt. Dozen, Lbs	6 %	8 1/2	10 %	14 %	18 %
Polished Bronze	\$14.60	16.30	18.00	21.80	25.45
Antique Copper	15.85	17.60	19.25	23.05	26.70

No. 1020-Wrought Steel Bright, Brass Plated Knob Width 11/4 in., Lip Extension 17/6 in., 1/2 in. Square Bolt Length, Inches.. 6 9 12 15 18 Wt. Dozen, Lbs. 6 8 10 12 14 18 Per Dozen..... \$8.65 9.70 10.90 11.95 13.00 15.20 6 in., One Dozen; Others, One-half Dozen in a Box.



Cast Bronze Polished A 2261 A 2261 Nos. Size, Inches . . %x8 1x8 1x12 Weight Each, Lbs..... Polished Brass Finish. Each, \$2.55 Six in a Box, with Screws. 2.65 3.35

#### BOTTOM CANE BOLTS



...\$2.40

Wrought Steel, Extra Heavy

For Use on Bottom of Garage or Warehouse Doors.

5% in. Diameter, 18 in. Long.

Per Dozen Weight Per Dozen 36 Pounds.

34 in Diameter, 24 in Long. No. 524G-2—Galvanized . . . . . . . . . . . . 15.00 Weight Per Dozen 54 Pounds.

One-sixth Dozen in a Metal Edged Box, with Screws, Keeper Plates, Brackets and Guides.

# FOOT BOLTS



#### Cast Iron

No. EA3143—Dull Brass, Natural Color. \$5.15 Weight Per Dozen 3 % Pounds.

# Cast Bronze, Polished

Size 2 % x1 1/2 inches.

No. EA143—Dull Brass, Natural Color. 14.40 Weight Per Dozen 3½ Pounds. One Dozen in a Box, with Screws.

#### Cast Iron

Width 11 inches.

No. R3244 ½ —Antiqu	e Coppe	E
Length, Inches	3	4
Weight Per Dozen, Lbs	3 %	4
Per Dozen	\$5.60	6.40
No. EA32441/2 -Dull Brass,	Natural	Color
Length, Inches	3	4
Per Dozen	85 60	6 40

#### Cast Bronze, Polished

Width 111 inches.

#### No. B12441/2 -- Polished Bronze

Length, Inches	3	4
Weight Per Dozen, Lbs	3 %	4 1/4
Per Dozen	\$13.60	
One-half Dozen in a Box	x, with	Screws.

#### Cast Iron

Width 2 1/4 inches.

# No. J13250—Japanned

Len;	gth,	Inches		6	8
Wt.	Per	Dozen,	Lbs	11 %	15
Per	Doz	en		\$7.10	8.35

# No. B13250—Polished Bronze

Length, Inche	88	6	8
Per Dozen		\$8.90	11.10

No.	R1325	0—Anti	ique Cop	per
Length,	Inches		6	8
Don Don	0.99		00 00	44 40

#### No. EA13250—Dull Brass, Natural Color

#### Cast Bronze, Polished Width 2 1/8 inches.

# No. B4250½—Polished Bronze Length, Inches . . . . 6 8 Wt. Per Dozen, Lbs. . 13¼ 16 Per Dozen . . . . \$28.90 36.10 One-half Dozen in a Box, with Screws.

# Wrought Steel No. 1056J—Japanned

10, 10000	-oapann	C CI	
Length Bolt, Inches	6	- 8	10
Length Plate, Inches.,	5	7	9
Width Plate, Inches	2	2 %	3.3%
Diameter of Bolt, In	5/8	34	7/8
Wt. Per Dozen, Lbs	8 1/2	12	30
Per Dozen	\$13.75	22.90	32.50

#### No. 356F-Dull Brass

Length Bolt, Inches	3	6	8
Length Plate, Inches	2 1/2	5	7
Width Plate, Inches	1 3/8	2	2 34
Diameter of Bolt, In	1/2	5/8	34
Wt. Per Dozen, Lbs	2 14	8 1/2	12
Per Dozen	\$10.65	15.65	26.00

Note—The 3, 6 and 8 inch sizes are packed with Strike Plate; 10 inch size with Strike Plate and Concrete Floor Strike.

3 and 6 in., One Dozen; 8 in. One-quarter Dozen; 10 in. One-twelfth Dozen in a Box, with Screws.

# CHAIN BOLTS



Cast Iron Size 2x1½ inches.

Per Dozen
No. EA3142—Dull Brass, Natural
Color ........\$5.15
Weight Per Dozen 3 Pounds.

Cast Bronze

Size 2x1½ inches.



#### Cast Iron

Width 2 1/2 inches.

# No. J13252—Japanned

 Length,
 Inches...
 4
 6
 8

 Wt.
 Dozen,
 Lbs...
 6 %
 12
 15

 Per
 Dozen......
 \$6.00
 7.35
 8.90

#### No. B13252—Polished Bronze

Length, Inches... 4 6 8 Per Dozen..... \$8.00 9.35 11.65

#### No. R13252-Antique Copper

Length, Inches... 4 6 8 Per Dozen...... \$8.00 9.35 11.65

#### No. EA13252—Dull Brass, Natural Color

Length, Inches. 4 6 8 Per Dozen,..... \$8.00 9.35 11.65

#### Cast Bronze, Polished

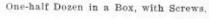
Width 21/8 inches.

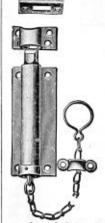
#### No. B4252 1/2 -- Polished Bronze

Length, Inches		6	8
Weight Per Dozen, Lbs		13	161/2
Per Dozen	\$20.00	26.65	36.00

#### No. EA4252 1/2 - Dull Brass, Natural Color

Per Dozen	36.00





#### Wrought Steel

# No. 1055J—Japanned

 Length Bolt, In.
 6
 8
 10

 Length Plate, In.
 5
 7
 9

 Width Plate, In.
 2
 2 ¾
 3 ¾

 Diam. Bolt, In.
 ¾
 ¾
 ¾

 Wt. Dozen, Lbs.
 12
 13 ¼
 33

 Per Dozen
 814.40
 23.75
 33.75

#### No. 355F-Dull Brass

 Length Bolt, In.
 3
 6
 8

 Length Plate, In.
 2 ½
 5
 7

 Width Plate, In.
 1 ½
 2
 2 ½

 Diam.
 Bolt, In.
 ¾
 ¾
 ¾

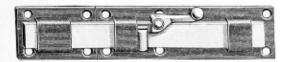
 Wt.
 Dozen, Lbs.
 4
 12
 13 ¼

 Per Dozen
 \$11.90
 17.50
 26.90

These bolts can be reversed by removing the set screw, permitting them to be used on the outside or inside of doors.

3 and 6 in. One-half Dozen; 8 in. One-quarter Dozen; 10 in. One-twelfth Dozen in a Box, with Screws.

# LOCK SHUTTER BOLTS



No. 1118-Japanned Plate, Polished Bolt, Tinned Knob

 Length, Inches
 6
 8
 10
 12

 Weight Per Dozen, Lbs
 8 ½
 11
 16
 18

 Per Dozen
 \$8.80
 9.55
 11.45
 14.65

One-half Dozen in a Box.

# SPRING FLAT BOLTS



#### No. 1050-Wrought Steel, Bright, Extra Heavy

Plate 1 % in. Wide, Bolts % in. Square.

Length, Inches	8 18 \$15.00	10 20 15.95	$12 \\ 22 \\ 17.00$
Length, Inches	23	18 27 19.40	24 33 20.60

 and 12 in., Packed with No. 1 Flat Staple; Larger Sizes with No. 4 Strap Staple.

One-quarter Dozen in a Box.

#### SQUARE BOLTS



No. 1088—Heavy, Wrought Steel, Japanned Plate, Polished Bolt, Sherardized Steel Spring

3 in. Size have Bolts  $\frac{1}{10}$  in. Square; 4 and 5 in.  $\frac{9}{20}$  in. Square; 6 in.,  $\frac{1}{2}$  in. Square; 8 in.,  $\frac{9}{20}$  in. Square; 10 and 12 in.,  $\frac{9}{4}$  in. Square.

Length, Inches	3	4	5	6
Wt. Per Dozen, Lbs Per Dozen	2 1/4 \$4.25	4 1/2 5 . 30	5 1/4 5 . 60	7.60
Length, Inches		8	10	12
Wt. Per Dozen, Lbs Per Dozen		\$11.15	30 16.95	36 20.60

6 in. and Smaller, One Dozen; 8 in., One-half Dozen; 10 and 12 in., One-quarter Dozen in a Box.

# SPRING BOLTS



#### No. 0149 1/2 -- Wrought Bronze, Polished

Length, Inches	4
Weight Per Dozen, Lbs 3	4 %
Per Dozen \$13.60	15.20

One-half Dozen in a Box, with Screws.

# SPRING BOLTS



#### No. 1411/2 -- Cast Bronze, Polished

 Length, Inches
 3
 4
 5
 6

 Weight Per Dozen, Lbs.
 3 1/8
 4 3/4
 6 1/4
 9 1/4

 Per Dozen
 89.60
 13.20
 16.80
 21.60

One-half Dozen in a Box, with Screws.



#### No. 1154-Wrought Steel, Japanned Plate, Polished Bolt

Length, Inches	2 1/2	3	4
Weight Per Dozen, Lbs	940	1 1/4	1 34
Per Dozen	\$2.30	2.55	3.45

One Dozen in a Box.

#### No. 1155-Wrought Brass

Length, Inches	21/2	3	4
Weight Per Dozen, Lbs	96	910 6.55	1 %
Per Dozen	\$5.40	6.55	8.65

One Dozen in a Box.



No. 1102—Wrought Steel, Japanned Plate, Polished Bolt, Sherardized Steel Spring

Length, Inches	4	6
Offset, Inches	3/2	5/8
Weight Per Dozen, Lbs	4 1/2	5
Per Dozen	\$9.55	13.80

One-half Dozen in a Box.



No. 1150—Wrought Steel, Japanned Plate, Polished Bolt

 Length, Inches
 2
 2 ½
 3
 4

 Weight Per Dozen, Lbs.
 ½
 ½
 ½
 1
 1½

 Per Dozen
 \$2.10
 2.30
 2.55
 3.45

#### No. 1151-Wrought Brass

Length, Inches	2	234	3	4
Weight Per Dozen, Lbs	1/2	910	1	1 %
Per Dozen	84.45	5.40	6.55	8.65

One Dozen in a Box.



No. 1551.

No. 15511/2.

Wrought Brass

Per Dozen

# MOSQUITO BAR BOLTS



# BARREL BOLTS



Wrought Steel, Light
No. 1078—Japanned Plate, Polished Bolt, Brass
Plated Knob



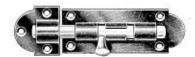
No. 1923—Wrought Brass, Polished

Length, Inches . . . . 2½ 3 4 5 6

Weight Dozen, Lbs. . 2¼ 3 3½ 4½ 5

Per Dozen . . . . . \$4.40 6.05 7.15 10.00 12.00

One Dozen in a Box, with Screws.



Wrought Steel, Heavy No. 1084—Japanned Plate, Polished Bolt, Brass Plated

# MORTISE BOLTS





| Per Dozen | No. 5251—Dull Brass, Natural Color | \$15.00 | No. 5235—Polished Brass | 15.00 | No. 5242—Nickel Plated | 16.10 | Description—2 % x1 ¼ x ½ in. Japanned Iron Case, 1 ¾ in. Backset, ½x2 ½ in. Cast Bronze Front and Strike, Cast Bronze Bolt, Turnpiece and Escutcheon, Brass Hub

for 16 in. Spindle.

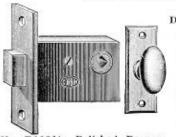
Weight Per Dozen 8 Pounds.

One-half Dozen in a Box, with Screws.

# MORTISE BOLTS



Description—1%x2% in. Japanned Iron Case, 1% in. Backset, 3x†† in. Cast Bronze Front, Cast Bronze Bolt, Reversible, Cast Bronze Thumb Knob, Operates by Thumb Knob from One Side Only.



Description — 2 1/8 x 3 1/4 in.
Japanned Iron Case, 2 1/4
in. Backset, 4 1/2 x 1/2 in.
Cast Bronze Front, Cast
Bronze Bolt, Reversible,
Cast Bronze Thumb
Knob, Operated by
Thumb Knob from One
Side Only.



Wrought Bronze, Cast Bronze Knob, Iron Bolt

1 % x % in. Plate, % in. Backset.

No. EA0657 4—Dull Brass, Natural Color......\$5.50
Weight Per Dozen 2 % Pounds.

One Dozen in a Box, with Screws.



Wrought Steel, Iron Bolt and Knob

1 % x % in. Plate, 1 % in. Backset. Per Dozen

Wrought Bronze, Cast Bronze Knob, Iron Bolt %x1% in. Plate, 1% in. Backset.

No.	
No.	R0657—Antique Copper, Polished 5.55
No.	EA0657—Dull Brass, Natural Color 5.55
No.	A0657—Polished Brass 5.55
No.	SKA0657-Sanded Brass, Oxidized and Re-
1257.00	lieved 6.10
No.	E0657—Nickel Plated, Polished 6.10
No.	F0657—Genuine Rustless Iron 5.55

Weight Per Dozen 2 % Pounds. One Dozen in a Box, with Screws.

# BOOK CASE BOLTS

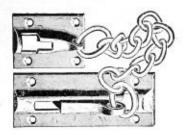
REVERSIBLE



Cast Bronze, Polished

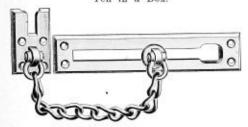
One Dozen in a Box, with Screws.

# CHAIN DOOR FASTENERS



#### Cast Bronze

3 1/2	inch Plate. Eac	h
No. 3100CX-Dull Brass,	Natural Color\$1.5	0
Weight Per	Box 3 1/2 Pounds.	
Ten	in a Box	



#### Cast Bronze, Polished.

	6 inch Plate. Per Do	zen
No.		
No.	R2264 1/2 -Antique Copper, Polished 40	.00
No.		.00
No.	SKA2264 1/2 Sanded Brass, Oxidized and Re-	
	lieved 44	.00
No.	E2264 1/2 Nickel Plated, Polished 44	.00
	Wetcht Den Denen 62/ Bounds	

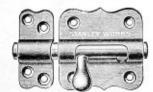
Weight Per Dozen 8% Pounds. One-half Dozen in a Box, with Screws.



# Wrought Steel

	6 inch Plate.	Per Dozen
No. Ros	2641/2-Antique Copper	\$11.20
No. EA03	264 1/2 - Dull Brass, Natural Colo	r 11.20
	Weight Per Dozen 4 1/2 Pound	
	One-half Dozen in a Box, with \$	Screws.

# CELLAR WINDOW BOLTS



#### Wrought Steel

No. 1076—Japanned Pla	ite, Polishe	d Bolt	
Length, Inches	2 1	2 1/2	2 %
Per Dozen	\$2.10	2.25	2.90
One Dozen in			

# CELLAR WINDOW SETS



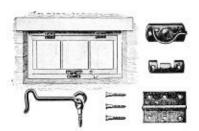
#### Wrought Steel

		Per Dozen Sets
o.	1760J-Japanned Fini	sh\$7.20
lo.	1760Z-Sherardized Fi	nish 9.40

#### Contents of Set

One Pair 3 in. Wrought Steel Narrow Butts. One 2½ in. Hook and Eye, Two 2½ in. Cellar Window Bolts.

Weight Per Dozen Sets 8 Pounds. One Set in a Box, with Screws; One Dozen Boxes in a Carton.



#### Wrought Steel

								Ŀ	'e	Г	D	02	Zθ	n Sets
No.	07-Japanned Finish					 ,								\$2.75
No.	007-Galvanized			 										3.00

#### Contents of Set

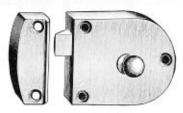
One Pair 2 1/2 in. Tight Pin Butts.

One Sash Fastener.

One Hook and Eye.

Weight Per Dozen Sets 5 1/2 Pounds. One Set in a Box, with Screws; One Dozen Boxes in Carton.

# SECRET GATE LATCHES



Cast Iron. 2x2 1/2 in.

	Per D	
No.	J01413—Japanned	2.00
No.	R01413—Antique Copper	1.70
No.	EA01413-Dull Brass, Natural Color 1	1.70
2101		

#### Cast Bronze, Polished

2x2 1/2 in.

Weight Per Dozen 714 Pounds. One-half Dozen in a Box, with Screws.

# DOOR BUTTONS



Cast Iro

> Weight Per Gross 3 Pounds. One Gross in a Box.



#### No. 1123-Cast Iron, Japanned

 Size, Inches
 1¼
 1½
 1¾
 2
 2½

 Weight Per Gross, Lbs.
 3
 3¼
 4¼
 6¼
 11¾

 Per Gross
 \$1.05
 1.20
 1.35
 1.75
 3.20

 2½ in., One-half Gross; Others, One Gross in a Box.



Cast Brass

> Weight Per Gross 1% Pounds. One Gross in a Box, with Screws.



#### No. 196-Wrought Brass, Polished

 Size, Inches
 134
 132
 134
 2

 Weight Per Gross, Lbs.
 232
 256
 234
 342

 Per Gross
 87.00
 8.00
 9.35
 10.65

 One Gross in a Box, with Screws.



# No. 186-Wrought Brass, Polished

 Size, Inches
 1½
 2

 Weight Per Gross, Lbs
 7
 10

 Per Gross
 \$24.45
 29.35

 One-half Gross in a Box, with Screws.

# SHOW CASE CATCHES



#### Cast Bronze

1½x1½ in.

Per Dozen

Bronze \$7.75

114x2 in.

ELBOW CATCHES



Cast Iron

%x11/4 in. Plate.

#### Cast Brass

%x1 1/4 in. Plate.



Cast Bronze

2 1/4 x1 in. Plate,

> Weight Per Dozen 1% Pounds. One Dozen in a Box, with Screws.

# LEVER CUPBOARD CATCHES



#### Cast Bronze

> Weight Per Dozen 1½ Pounds. One Dozen in a Box, with Screws.



#### Wrought Bronze

11/2 in, Round Base, for Doors up to 11% in. Thick.

 No.
 9400-10
 —Polished Bronze
 S8.00

 No.
 9400-16
 —Antique Copper, Polished
 S.00

 No.
 9400-23
 —Dull Brass
 S.00

 No.
 9400-23 ½
 —Sanded Brass, Oxidized and Relieved
 S.75

 No.
 9400-19
 —Nickel Plated, Polished
 S.75

This Lever Thumb Catch is far superior to ordinary catches. It operates easily, and the necessity of slamming the door, which is the objectionable feature in all catches, is avoided.

Weight Per Dozen 2 Pounds. One Dozen in a Box, with Screws.

# FRICTION CATCHES



Brass Shell, Strike and Bolt

One Gross in a Box.



Brass Shell, Strike and Bolt

Per Gross
No. 10½—Diameter ¾ in., Length
¾ in., Strike 1½x½ in....\$6.85

Weight Per Gross 2 Pounds.

One Gross in a Box.





Brass Shell, Strike and Bolt

Per Gross

No. 11—Diameter ¾ in., Length

% in., Strike 1½x½ in...\$7.50

Weight Per Gross 2½ Pounds.

One Gross in a Box.

No. 11.



One Dozen in a Box.

No. 01819.



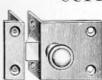
Wrought Brass, Easy Spring

Weight Per Dozen % Pound.

One Dozen in a Box.

No. 01820.

# CUPBOARD CATCHES



Cast Bronze 1 1/4 x 1 % in.

Per Dozen No. B2280½—Polished Bronze. \$10.40

Weight Per Dozen 1 1/2 Pounds. One Dozen in a Box, with Screws.

No. B2280 1/2.



Cast Bronze

1x2 in.

Per Dozen

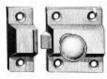
No. B2269 1/2 — Polished Bronze. . 813.35

Weight Per Dozen 2 Pounds.

One Dozen in a Box, with Screws.

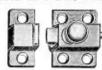
No. B2269 1/2.

# CUPBOARD CATCHES



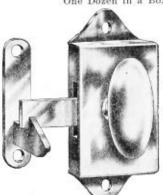
Cast Iron

	1x1 % in. Per :	Dozen
No.	B13270 14 Bronze Plated, Polished	
No.	R1327014 Antique Copper, Polished	2.55
No.	EA13270 14 - Dull Brass, Natural Color	2.55
No.	E13270 4 — Nickel Plated, Polished	2.80
	Weight Per Dozen 11/4 Pounds.	
	1 1/4 x 1 3/8 in.	
No.	Y13271 —Amber Bronzed	1.60
No.	B13271 14 Bronze Plated, Polished	2.70
No.	R13271 14 Antique Copper, Polished	2.70
No.	EA13271 14 - Dull Brass, Natural Color	2.70
No.	SKA1327114-Sanded Brass, Oxidized and Re-	
	lieved	2.90
No.	E13271 —Nickel Plated, Polished	2.90
	Weight Per Dozen 11/2 Pounds.	
	Cast Bronze, Polished	
	1x1% in.	
No.	B2270 1/2 — Polished Bronze	
No.	R2270 1/2 —Antique Copper	6.00
No.		6.00
No.		6.65
43	Weight Per Dozen 1 1/4 Pounds.	
	1 1/4 x 1 3/8 in.	
No.	B2271 1/2 Polished Bronze	6.65
No.	R2271 1/2 -Antique Copper, Polished	6.65
No.	EA2271 1/2 - Dull Brass, Natural Color	6.65
No.	A2271 1/4 — Polished Brass	6.65
No.	SKA227114-Sanded Brass, Oxidized and Re-	
	lieved	7.35
No.	E2271 1/2 - Nickel Plated, Polished	7.35
No.	F2271 1/2 — Genuine Rustless Iron	5.35
	Weight Per Dozen 1 % Pounds.	
	One Dozen in a Box, with Screws.	



Wrought Steel

	1x1 % in.	Per I	Dozen
No.	R11270—Antique Copper		1.30
No.	EA11270—Dull Brass, Natural Color		1.30
No.	E11270—Nickel Plated		1.50
	1 % x1 % in.		
	R11271—Antique Copper		
No.	EA11271-Dull Brass, Natural Color		1.40
No.			1.60
	Weight Per Dozen 1 Pound.		
	One Dozen in a Box, with Screws.		



Wrought Steel

2 14 x1 in.

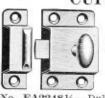
Per Dozen No. 001301—Dull Brass, Natural Color....\$2.40

No. 1301-N --- N i c k e l Plated . . . . . . . 2.40

Weight Per Dozen 11/4 Pounds.

One Dozen in a Box, with Screws.

# CUPBOARD TURNS



#### Wrought Steel

1 % x2 1/8 in. Per Dozen No. R13048—Antique Copper.\$1.85 No. EA13048—Dull Brass, Natural Color . . . . . . . . . . . . . . . . . 1 . 85 Weight Per Dozen 11/2 Pounds.

Wrought Bronze

	EA2248½—Dull Brass, Natural Color	6.00
No.	A22481/2 — Polished Brass	6.00
	Weight Per Dozen 2 Pounds.	

One Dozen in a Box, with Screws.

Cast Iron, Polished 1 ½ x1 ¾ in. Per Dozen No. R1303314 -Antique Copper, No. EA13033 1/4 - Dull Brass, Natural Color . . . . . . . . . . . . . . . . 4 . 35 No. SKA13033 ¼ — Sanded Brass, Oxidized and Relieved . . . . . 4.70

Weight Per Dozen 2 Pounds.

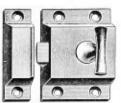
1 1/2 x 2 1/8 in.

R13043 14 — Antique Copper, Polished...... 4.70 EA13043 14 — Dull Brass, Natural Color...... 4.70 No. No. SKA1304314 - Sanded Brass, Oxidized and Relieved .. Cast Bronze, Polished 1 1 % x 1 % in.

R2233 1/2 -- Antique Copper, Polished . . . . . . 8.40 No. No. EA2233 ½ — Dull Brass, Natural Color...... 8.40 No. SKA2233 ½ — Sanded Brass, Oxidized and Re-

1 1/2 x 2 1/8 in. R22431/2-Antique Copper, Polished . . . . . . 9 . 60 No. EA224814—Dull Brass, Natural Color...... 9.60 No. SKA224314—Sanded Brass, Oxidized and Relieved ..

Weight Per Dozen 3 % Pounds, One Dozen in a Box, with Screws.



# Cast Iron

1 % x1 % in. Per Dozen No. R1303414 -- Antique Copper, Polished......\$4.45 No. EA13034¼ — Dull Brass, Natural Color . . . . . 4.45 No. SKA13034¾—Sanded

Brass, Oxidized and Relieved . . . . . . . . . . . . . . . 4 . 80 No. E1303414 -- Nickel Plated, Polished......4.80

	Weight Per Dozen 2 Pounds.	
	1 ½ x2 ¼ in.	
No.	Y13039 —Amber Bronzed 3	. 70
No.	B13039 1/4 — Bronze Plated 4	.80
No.		.80
No.	EA13039 14 — Dull Brass, Natural Color 4	.80
No.	SKA13039 1/4 Sanded Brass, Oxidized and Re-	*****
	lieved 5	.15
No.	E1303914 -Nickel Plated, Polished 5	. 15
	Weight Per Dozen 3 1/2 Pounds.	
	Cast Propre Polished	

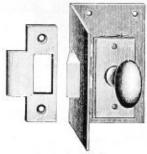
Cast Bronze, Polished 1 1/4 x 1 3/4 in. EA20341/2-Dull Brass, Natural Color ..... 8.40 No. A2034 1/2 — Polished Brass ..... 8.40 No. No. SKA20341/2-Sanded Brass, Oxidized and Relieved eved 9.20 E2034 14—Nickel Plated, Polished 9.20

Weight Per Dozen 2 1/8 Pounds. 1 1/2 x 2 1/8 in. No. No. EA203912-Dull Brass, Natural Color..... 9.60 No.

No. No.

Weight Per Dozen 3 1/2 Pounds. One Dozen in a Box, with Screws.

# CUPBOARD LATCHES

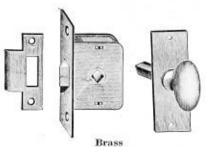


Brass, Buffed and Lacquered

Heavy Cast Brass Latch Bolt, Reversible, for 11/8 in.

Nos. . . . . . . . . . . . . 0239C 0239D 0239E 0239F Size, Inches ...... 2 % x1 % 2 % x1 % 2 % x1 % 2 % x2 % Size, Inches .... %
Backset, Inches .... %
Lhs. 4% 114 7/8 4 76 4 7% 5 45.30 45.30

> Both & and & in. Spindles can be used. One-half Dozen in a Box.

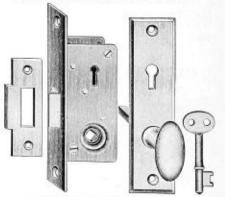


Per Dozen

No. 0226—2 % x1 ½ in., % in. Backset, Brass Selvedge, Latch Bolt, Knob, Escutcheons and Strike ......\$19.50

Weight Per Dozen 3 1/4 Pounds. One Dozen in a Box.

# CUPBOARD LOCKS



Brass, Buffed and Lacquered

Broad Heavy Cast Brass Latch Bolt, Reversible, Screwed Steel Case, 1 Tumbler, 1 Solid Bronze Buffed Key which

Enters from Either Side, for % to 1% in. Wood.	
Nos	0234D
Size, Inches 4x1 1/4	4x1 36
Backset, Inches	7/8
Weight Per Dozen, Lbs 4 7/4	78
Per Dozen \$33.00	33.00
One-half Dozen in a Box.	00.00

# REFRIGERATOR FASTENERS

STANDARD



#### Cast Brass

Length Over All 5 in., Length Lever

With Flush Strike

Per Dozen No. 614 -Polished Brass . . . . \$16.00 No. 614N-Nickel Plated . . . . . 18.00

With % in. Offset Strike

No. 0614 -Polished Brass.... \$18.00 No. 0614N-Nickel Plated . . . . 20 . 00

Note-Illustration Shows Right Hand. In Ordering, State if Right or Left Hand is Wanted.

Weight Per Dozen 5 % Pounds.

One Dozen in a Box.

#### FOUR-IN-ONE

Length Over All 41/4 in., Length Lever 3 1/2 in. No. 6582 -Polished Brass....\$1.00 No. 6582N-Nickel Plated . . . . 1.10

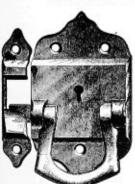
This Fastener can be used either Right or Left Hand and for either Flush or Offset Doors.

Reversing the strike makes it suitable for either Flush or Offset Doors. This does away with the necessity of carrying Right and Left Hand Fasteners and Flush and Offset Strikes in Stock.

Weight Per Box 41/4 Pounds. Ten in a Box.



# REFRIGERATOR LOCKS



Cast Brass 4x2 1/4 in.

With Flush Strike

Per Dozen

No. 873 —Polished Brass . . . . . . . . . \$12.00 No. 873N—Nickel Plated 14.00

With % in. Offset Strike

No. 0873 —Polished Brass . . . . . . . . . 12.75

No. 0873N-Nickel Plated 14.75

Note-Illustration Shows Right Hand. In Ordering State if Right or Left Hand is Wanted.

Weight Per Dozen 9% Pounds. One-half Dozen in a Box, with One Key for Each Lock.

#### Cast Brass With Flush Strike

Per Dozen No. 1801-3 % x2 in., Natural Finish ..........\$10.00

With % in. Offset Strike. No. 01801-3 % x2 in., Nat-

ural Finish ...... 11.00

Note-Illustration Shows Right Hand. In Ordering State if Right or Left Hand is Wanted.

Weight Per Dozen 61/4 Pounds. One-half Dozen in a Box, with One Key for Each Lock.



# REFRIGERATOR LATCHES



Cast Brass 1 % x2 1/2 in.

With Flush Strike No. 610 —Polished Brass ...... \$ 8.50 No. 610N—Nickel Plated . . . . . . . . . . . . . . . . 9.75 With % in. Offset Strike No. 0610 — Polished Brass . . . . . . . . . . . . . . . . 9.00 Weight Per Dozen 4 % Pounds.

1 34 x3 1/2 in. With Flush Strike With % in. Offset Strike Weight Per Dozen 7 7 Pounds. One Dozen in a Box.

# REFRIGERATOR FASTENERS

GLOEKNER

These Fasteners are easy to operate and have nothing to break, wear out or get out of order.

In closing the door, turn the lever inside the keeper and press down on the handle. This seals the door perfectly tight with little effort.

To open turn the handle around until lever comes outside the keeper, then lift on the handle which will force the door open no matter how tightly sealed. Can be used on Right or Left Hand Doors.

#### OUTSIDE HANDLE ONLY



Malleable Iron, Tinned

11 8 1/2 2 % 1 16 Weight Each, Lbs.... 2.00 

#### WITH INSIDE HANDLE

This Fastener is similar to Nos. 1, 2 and 3 described above, but with a bolt extending through the door and a handle on the inside allowing the fastener to be operated from both sides of door.

Mallcable Iron, Tinned 00 Nos. 0 Length Lever, Inches 16 13 3.40 Each ..... One in a Box.



# CASEMENT FASTENERS

#### REVERSIBLE





Surface Strike.

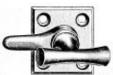
Rim Strike.

The above strikes also furnished with Nos. 03166, 02166, 03170 and 02170 Fasteners.

#### Cast Bronze Thumb Turn and Strike, 1 % x1 % in. Wrought Bronze Plate

	Strike	Finish	Pe	r Dozen
No.	Strike EA02159M—Mortise,	Dull Brass		.\$7.35
No.	A02159M—Mortise,	Polished Brass		. 7.35
No.	SKA02159M-Mortise,	Sanded Brass		. 8.00
No.	EA02159S -Surface,	Dull Brass	voca.	. 7.35
	A02159S —Surface,			
No.	SKA02159S -Surface,	Sanded Brass		. 8.00
	EA02159R — Rim, Du			
No.	A02159R-Rim, Po	lished Brass		. 7.35
No.	SKA02159R-Rim, Sat	nded Brass		. 8.00

Weight Per Dozen About 2 % Pounds. One Dozen in a Box, with Screws.



#### Cast Iron, 1%x1% in. Plate

Strikes Same Style as No. 02159.

	Strike Finish		
No.	R03166M-Mortise, Antique Copper	30	 \$2.65
No.	EA03166M-Mortise, Dull Brass		 2.65
No.	SKA03166M-Mortise, Sanded Brass		 3.00
No.	E03166M-Mortise, Nickel Plated		 3.00
	R031668 - Surface, Antique Copper		
No.	EA03166S Surface, Dull Brass		2.65
No.	SKA03166S Surface, Sanded Brass		3 00
No.	E03166S -Surface, Nickel Plated		3.00
No.	R03166R-Rim, Antique Copper		 2.65
No.	EA03166R—Rim, Dull Brass		 2.65
No.	SKA03166R-Rim, Sanded Brass		3.00
No.	E03166R—Rim, Nickel Plated	3	 3.00

#### Cast Bronze, Polished, 1 % x1 % in. Plate

	Strikes Same Style as No. 02159.
22200	Strike Finish Per Dozen
No.	B02166M—Mortise, Polished Bronze. 88 00
No.	R02166M-Mortise, Antique Copper 8.00
No.	EA02166M-Mortise, Dull Brass 8.00
No.	A02166M-Mortise, Polished Brass 8.00
No.	SEL 1001 COM Morting Conded Dungs
-	SKA02166M—Mortise, Sanded Brass 8.65
No.	
No.	F02166M—Mortise, Rustless Iron 5.55
No.	B02166S — Surface, Polished Bronze. 8 00
No.	R021668 - Surface, Antique Copper 8.00
No.	EA021668 —Surface, Dull Brass 8.00
No.	A021668 - Surface, Polished Brass 8.00
No.	SKA02166S-Surface, Sanded Brass 8.65
No.	E02166S -Surface, Nickel Plated 8.65
No.	F021668 —Surface, Rustless Iron 5.55
No.	B02166R-Rim, Polished Bronze 8.00
No.	R02166R—Rim, Antique Copper 8.00
No.	
	EA02166R—Rim, Dull Brass 8.00
No.	A02166R—Rim, Polished Brass 8.00
No.	SKA02166R-Rim, Sanded Brass 8.65
No.	
No.	F02166R—Rim, Rustless Iron 5.55

Weight Per Dozen About 3 1/2 Pounds. One Dozen in a Box, with Screws.

# CASEMENT FASTENERS



#### REVERSIBLE

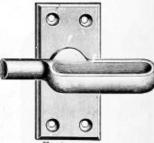
Cast Iron, 178x138 in. Plate

Strikes Same Style as No.

	Strike Finish	Per Dozen
No.	R03170M-Mortise, Antique Copper	\$3.65
No.	EA03170M-Mortise, Dull Brass	3.65
No.	SKA03170M-Mortise, Sanded Brass	4.00
No.	E03170M-Mortise, Nickel Plated	4.00
No.	R031708 -Surface, Antique Copper	3.65
No.	EA031708 -Surface, Dull Brass	3.65
No.	SKA03170S -Surface, Sanded Brass	4.00
No.	E031708 Surface, Nickel Plated	4.00
No.	R03170R-Rim, Antique Copper	
No.	EA03170R-Rim, Dull Brass	3.65
No.	SKA03170R-Rim, Sanded Brass	4.00
No.	E03170R-Rim, Nickel Plated	4.00
	Cast Bronze, Polished, 1%x1% in. Plate	e
	Strikes Same Style as No. 02159.	
No.	B02170M-Mortise, Polished Bronze	8.00
No.	R02170M-Mortise, Antique Copper	
No.	EA02170M-Mortise, Dull Brass	8.00
No.	A02170M-Mortise, Polished Brass	8.00
No.	SKA02170M-Mortise, Sanded Brass	8.90
No.	E02170M-Mortise, Nickel Plated	8.90
No.	F02170M-Mortise, Rustless Iron	5.35
No.	B02170S -Surface, Polished Bronze	8.00
No.	R021708 - Surface, Antique Copper	
No.	EA02170S -Surface, Dull Brass	
No.	A02170S -Surface, Polished Brass	
No.	SKA02170S -Surface, Sanded Brass	
No.	E021708 - Surface, Nickel Plated	
No.	F021708 —Surface, Rustless Iron	
No.	B02170R—Rim, Polished Bronze	
No.	R02170R-Rim, Antique Copper	
No.	EA02170R-Rim, Dull Brass	
No.	A02170R—Rim, Polished Brass	8.00
No.	SKA02170R-Rim, Sanded Brass	8.90
No.		
No.	F02170R—Rim, Rustless Iron	5.35
	Weight Per Dozen About 4 Pounds.	
	One Dozen in a Box, with Screws.	







Cast Bronze, Polished, 31/8 x11/6 in. Plate

	The state of the s
	Mortise Strike Same as No. 02159. Strike Finish Per Dozen
No	B02164M-Mortise, Polished Bronze\$15.55
***	Bollotta Mortise, Folished Bronze\$15.55
No.	EA02164M—Mortise, Dull Brass 15.55
No.	A02164M—Mortise, Polished Brass 15.55
No.	SKA02164M—Mortise, Sanded Brass 17.10
No.	F02164M—Mortise, Rustless Iron 10.00
NO.	B021648 — Surface, Polished Bronze 15.55
NO.	EA021648 — Surface, Dull Brass
No.	A021648 — Surface, Polished Brass 15 55
No.	ShA021648 — Surface, Sanded Brass 17 10
No.	F02164S —Surface, Rustless Iron 10.00
No.	
	B02104R-Rim, Polished Bronze 15.55
No.	EA02164R—Rim, Dull Brass 15.55
NO.	A02164R Rim. Polished Brass.
NO.	SKA02164K—Rim, Sanded Brass
No.	F02164R—Rim, Rustless Iron 10.00
	Weight Per Dozen About 7 1/4 Pounds.
	Charles I and The Control of the Con

One-half Dozen in a Box, with Screws.

# CASEMENT ADJUSTERS

FOR CASEMENTS OPENING OUT



Cast Iron, Wrought Steel Bar

% in. Bar, % x2 % in. Sash Plate, % x2 % in. Sill Plate.

No. R0431/2 -- Antique Copper

 Length Bar, Inches
 10
 12

 Per Dozen
 \$5.10
 5.55

No. EA0431/2-Dull Brass, Natural Color

 Length Bar, Inches
 10
 12

 Per Dozen
 \$5.10
 5.55

Cast Bronze, Wrought Bronze Bar

% in. Bar, ¾ x2¼ in. Sash Plate, ¾ x2¼ in. Sill Plate.

No. A431/2-Polished Brass

 Length Bar, Inches
 10
 12

 Weight Per Dozen, Lbs
 11
 12

 Each
 \$2.00
 2.10

One-third Dozen in a Box, with Screws.

#### FOR CASEMENTS OPENING IN



One-third Dozen in a Box, with Screws.

# FOR CASEMENTS OPENING OUT



Cast Iron, Wrought Steel Rod and Sash Bracket

No. R0045-Antique Copper

No. EA0045-Dull Brass, Natural Color

 Length Bar, Inches
 8
 10

 Size Plate, Inches
 1 1/8 x8 %
 1 1/8 x10 %

 Per Dozen
 \$7.00
 9.45

Cast Bronze, Wrought Bronze Rod and Sash Bracket

No. EA45-Dull Brass, Natural Color

 Length Bar, Inches.
 8
 10

 Size Plate, Inches.
 1 ½ x8 %
 1 ½ x10 %

 Weight Per Dozen, Lbs.
 8 ¼
 10 %

 Each
 \$1.90
 2.00

No. A45-Polished Brass

 Length Bar, Inches.
 8
 10

 Size Plate, Inches.
 1 ½ x8 ½
 1 ½ x10 ¾

 Each
 \$1.90
 2.00

One-third Dozen in a Box, with Screws.

## CASEMENT ADJUSTERS

FOR CASEMENTS OPENING OUT



Cast Bronze, Polished



#### Wrought Bronze, Polished % in. Bar, % in. Tube.

 No. B56—Polished Bronze

 Length Closed, Inches.
 10
 12

 Length Extended, Inches.
 16 ¼
 20 ½

 Weight Per Dozen, Lbs.
 8 ½
 10

 Each
 \$1.65
 2.00

 No. EA56—Dull Brass, Natural Color

 Length Closed, Inches
 10
 12

 Length Extended, Inches
 16 ½
 20 ½

 Each
 \$1.65
 2.00

 No.
 E56—Nickel
 Plated, Polished

 Length
 Closed, Inches
 10
 12

 Length
 Extended, Inches
 16 1/4
 20 1/8

 Each
 \$1.80
 2.20

Six in a Box, with Screws.

#### FOR CASEMENTS OPENING OUT



Wrought Bronze, Polished % in. Bar, % in. Tube.

| No. B55—Polished Bronze | Length Closed, Inches | 10 | 12 | Length Extended, Inches | 16 ½ | 20 ½ | Weight Per Dozen, Lbs | 8 ½ | 10 | Each | 81.65 | 2.00 |

| No. EA55—Dull Brass, Natural Color | Length Closed, Inches | 10 | 12 | Length Extended, Inches | 16 1/4 | 20 1/8 | Each | \$1.65 | 2.00

 No. SKA55—Sanded Brass, Oxidized and Relieved

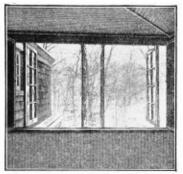
 Length Closed, Inches
 10
 12

 Length Extended, Inches
 16 ¼
 20 ½

 Each
 \$1.80
 2.20

# WHITCO CASEMENT HARDWARE

FOR CASEMENTS AND TRANSOMS



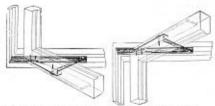
Any number of such may be installed in a wide opening without mullions.

Whitco is a simple, self-contained unit that takes the place of both butts and adjusters for swinging and controlling casements and transoms.

This hardware is easily and quickly applied to single sash, pairs of sash or to multiple sash in wide openings without mullions. It may be used on old or new sash.

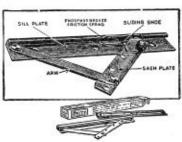
There are no lefts or rights. Whether the sash is to swing to the left or the right determines which piece goes at the top and which piece goes at the bottom.

No special sash or frame detail is required. The only fitting needed is a small housing at top and bottom of each sash, which the carpenter can make with a chisel. Otherwise a Otherwise a screwdriver is the only tool he uses in making an installation. No special hardware finishes need be considered. When installed Whitco is entirely concealed.



Whiteo applied at bottom of casement swinging out.

Whitco applied at top of casement swinging out.



One size fits all casements up to 30 inches in width, or all transoms up to For transoms 20 inches in height. over 20 inches high Whitco may be obtained in special sizes. Prices on request.

A set-the equipment for one casement or transom - consists of two pieces, one for the top and one for the bottom of a sash, or one for each side of a transom. These pieces are identical, except one is the reverse of the other.



Whitco makes it easy and safe to clean out-side of casement from within the room

Per Set

No. 057-Wrought Steel, Rust Proof Finish .... ...\$1.75 No. 57-Solid Brass, Dull Brass

Finish . . . . . . . . . . . . . 2.25

Each set, with 14 screws and installing instructions, is packed in a neat carton 1x1x8 inches, shipping weight 1 pound.



Whitco at left end of transom swinging in from top.



Whitco at right end of

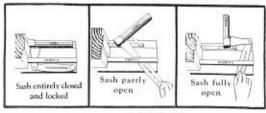


Whiteo-equipped transom swingng in from top



Whiteo-equipped transom swinging either in or out from bottom Ventilation both above and below transom.

# CALEDONIA CASEMENT CONTROLS



Solid Brass

Reversible, either right or left hand, for use on any single sash 14 in. wide or more, on any pair of sash with a total width of 24 in. or more, or on multiple sash of any width.

Caledonia-Dull Brass Finish . . . ...\$2.00 Other finishes furnished at a slight additional cost,

One in a Carton, with Screws and Installing Directions,

# FOR USE ON WHITCO EQUIPPED SASH

The Caledonia Casement Control, designed for use in combination with Whitco Casement Hardware, is the most practical means of opening, closing, and locking a casement without removing the screen.

It is a simple assembly of two arms, so fashioned as to adapt itself to the peculiar movement of a Whitco equipped sash, and with its leverage so multiplied that the maximum of force is exerted with a minimum of effort.

Like Whitco, this unit is easily and quickly applied to single sash, pairs of sash, and to multiple sash in wide openings without mullions.

The Caledonia control opens and closes sash instantly and positively. Locks sash securely when closed-closes and locks with one motion.

It is contained entirely between the jambs and within the width of the sills. Installed with four screws, no cutting or fitting required.

# CASEMENT WINDOW OPERATORS | CASEMENT WINDOW OPERATORS

WIN-DOR

Win-Dor Casement Operators open and close the casement without need of opening or closing the screen. A quick easy swing brings the window to the desired position from full-open to tight-shut. The moment the handle is released the window locks automatically in the desired position.



Surface Type

Length Sash Channel 13 1/2 in., Window Arm to Center of Pivot 10 in., Diameter Pivot Head 2 in., Height % in. all Sash Over 15 in. Wide, Either Wood or Metal.

FOR all Sasi Over 15 In. Wide, Eliter Wood of Stormer
Steel Each
No. 7—Parkerized (Rust Resisting Black) Finish, without Handle\$2.00
No. 78-Sherardized, without Handle 2.10
Steel Arm Pivot and End Piece, Solid Brass Channel Rivet and Spring Each
No. 5 -Sherardized, without Handle\$2.50
No. 5DB-Dull Brass, without Handle 2.75
No. 5SB-Sanded Antique Brass, without Handle 3.00
Solid Brass, Concealed Steel Re-enforcing Each
No. 6 -Dull Brass, without Handle
No. 6SB-Sanded Antique Brass, without Handle 4.00
Note-In ordering, specify Right or Left Hand as
viewed from within the room.
Weight Each 11/2 Pounds.
One in a Box, with Screws.
HANDLES ONLY

Wrought Steel

Interchangeable Right or Left Hand; May be Permanently Attached if Desired. 80.20 .20 25 No. 71DB-Dull Brass ..... .30 No. 71SB-Sanded Antique Brass . . .



Flush Type Plate 3 1/2 in. Square, Cup Depth (Including Plate) 1/2 in., Diameter Cup 2 1/2 in., Arm Length 9 1/4 in. to Center of Pivot, for All Sash Over 15 in. Wide.

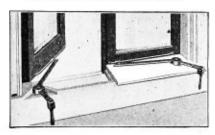
Cast and Wrought Brass	Each
No 24PDR Dull Brass, without Handle	Handle 6 40
No. 24BSB—Sanded Antique Brass, without Note—In ordering, specify Right or	Left Hand as
viewed from within the room.  Weight Each 2½ Pounds.	
One in a Box, with Screws.	

HANDLES ONLY

Cold Rolled Steel Interchangeable Right or Left Hand, Detachable Only. Each .....80.40 No. 241DB-Dull Brass No. 241SB-Sanded Antique Brass.....

Note-Offset Handles for deep inside jambs or Long Handles for use with projected cleaning hinges can be furnished for the above operation at same price.

MONARCH CONTROL LOCK



Wrought Steel Each No. 03-9—Dull Brass, Natural Color......\$5.00 Releases, swings and locks sash in one continuous

Note-When ordering, state hand. Weight Per Box 9 1/2 Pounds. Three Pairs in a Box.

# CASEMENT WINDOW CHECKS

MONARCH



Wrought Steel, Copper Discs No. 07Z —Zinc Plated .....\$0.85 No. 07DB—Dull Brass ...... 1.00

For use on transoms and casement windows. The Monarch casement check is composed of two copper discs, compressed between steel plates by means of an adjustment screw causing perfect friction that continues to function regardless of wear and strain.

Weight Per Box 6 Pounds. Twelve in a Box.

# CASEMENT FASTENERS

MORTISE



Cast Bronze, Polished Each B76-Polished Bronze .... \$2.20 No. EA76-Dull Brass, Natural Color ..... 2.20

Description—2 1/8 x1 3/8 x 1/2 in. Japanned Iron Case, 3/4 in. Backset, 3 1/2 x1/3 in Cast Bronze Front, Cast Bronze Bolt, Reversible, Hub for 5 in. Spindle.

Weight Per Dozen 4% Pounds. One-half Dozen in a Box, with Screws,

# WINDOW SPRING BOLTS

Per 100 ..\$3.10 No. 38-Steel, Tinned, for Extra Wide Sash..... 5.50 Weight Per Hundred 61/4 Pounds.

# One Hundred in a Box. WINDOW SPRING BOLT SOCKETS Per 100

No. 50-For Window Spring Bolts. . . . . . . \$1.10



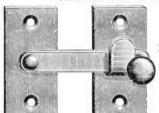
Weight Per Hundred 11/2 Pounds. One Hundred in a Box.

# SHUTTER BARS



Wrought Steel
Size 2 in. Per Dozen
No. R937—Antique Copper..\$1.90
No. EA937—Dull Brass . . . . 1.90
Wrought Bronze Polished
Size 2 in.

Weight Per Dozen 1 1/8 Pounds. Three Dozen in a Box, with Screws.



# Wrought Steel

Per Dozen
No. 1124J—3 in., Japanned ......\$2.50
Weight Per Dozen 314
Pounds.

One Dozen in a Box, with Screws.

# VENTILATING SASH LOCKS



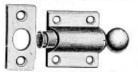




Lock.

Lock Applied to Window.

Cast Iron, Burnished



#### Cast Iron, Polished 1 1/4 x 1 1/6 in.

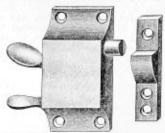
4.5.전에 보면 되었어요요요요요요요요요요요요요요요요요요요요요요요요요요요요요요요요요요요요	* or monor
No. EA01405-Dull Brass, Natural Color	\$6.65
Cast Bronze, Polished	
1 1/4 x1 1/8 in.	
No. B1405—Polished Bronze	8.00
No. EA1405-Dull Brass, Natural Color	8.00
Weight Per Dozen 2 Pounds.	11:07 BM:50
One Dozen in a Box, with Screws	



2 % x1 % in. Case, 3 Strikes, 3 Tumblers, 18 Changes, 2 Nickel Plated Flat Steel Keys, Bolt is Held Back by a Turn of the Knob.

Per Dozon

# VENTILATING SASH LOCKS



Cut Shows Right Hand Lock.

#### Cast Bronze

Size 2 % x1 % in., with Three Strikes.

# SASH FASTENERS



Cast Iron

1x2 % in. Case, %x2 % in. Strike.

		/e:	r Doze	n
No.	B1830—Bronze Plated		.81.5	5
No.	R1830—Antique Copper			
No.	EA1830-Dull Brass, Natural Color		. 1.5	5
No.	SKA1830—Sanded Brass		1.6	5
	Weight Per Dozen 2 % Pounds.	7.5		

#### Cast Bronze, Polished

1x2% in. Case, %x2% in. Strike.

No.	B1830 1/2 — Polished Bronze	8.80
No.	R1830 1/2 —Antique Copper, Polished	8.80
No.	EA1830 1/2 - Dull Brass Natural Color	8.80
No.	A1830 1/2 — Polished Brass	8.80
No.	SKA1830 1/2 - Sanded Brass, Oxidized and Re-	
	lieved	9.40
No.	E1830 1/2 - Nickel Plated Polished	9.40
No.	F1830 1/2 —Genuine Rustless Iron	4.90
	Weight Per Dozen 21/ Pounds	

Weight Per Dozen 3 % Pounds. One Dozen in a Box, with Screws.



Cast Iron

1 to x3 in. Case, 1x3 in. Strike.

No.	B1831-	Bronze Plated	3955	Dozen .\$2.80
	EA1831-	-Antique Copper -Dull Brass, Natural Color Weight Per Dozen 41/2 Pounds.		0 00

#### Cast Bronze, Polished

Weight Per Dozen 5 1/8 Pounds. One Dozen in a Box, with Screws.

#### SIDE SASH FASTENERS Malleable Iron 1 % in. Face Plate, 2 ½ in. Lever. Per Dozen No. 18F-Amber Bronzed \$2.00 No. 18B—Antique Copper. 2.50 No. 18C—Dull Brass..... 2.50 Weight Per Box 1 Pound. Malleable Iron, Extra Heavy 1 % in. Face Plate, 2 ¾ in. Lever. Per Dozen No. 8710B - Antique Copper ..... Weight Per Box 2 Pounds. Ten in a Box, with Screws. SASH LIFTS AND LOCKS Cast Iron 114 x178 in. Per Dozen B13313-Bronze Plated....\$2.75 No. R13313-Antique Copper., 2.75 No. No. EA13313—Dull Brass, Natural Color . . . . . . . . . . 2.75 No. SKA13313—Sanded Brass, Oxidized and Relieved . . . . . . 3.10 Weight Per Dozen 21/8 Pounds. Cast Bronze, Polished 1 ¼ x1 % in. B4313 ½ —Polished Bronze No. R4313 1/2 -Antique Copper, Polished . . . . . . 10.00 No. EA4313 1/2 - Dull Brass, Natural Color . . . . . . 10.00 No. No. No. SKA4313 1/2 - Sanded Brass, Oxidized and Re-Convin. B. 11.00 lieved F4313 1/2 - Genuine Rustless Iron . . . . . . . 7 . 10 Weight Per Dozen 21/2 Pounds. One Dozen in a Box, with Screws. HOOK SASH LIFTS Wrought Steel 1x1% in. Per Gross No. B11845-Bronze Plated, Polished ..... No. R11845-Antique Copper, Polished ...... No. EA11845-Dull Brass, Natural Weight Per Gross 6 % Pounds. One-quarter Gross in a Box, with Screws. Wrought Bronze, Polished 1x15% in. Per Dozen No. B2180-Polished Bronze . . . . . . . . . . . . . \$1.20 R2180-Antique Copper, Polished ...... 1.20 No. No. EA2180—Dull Brass, Natural Color...... 1.20 No. . 1.20 A2180—Polished Brass ..... No. Weight Per Dozen % Pound. Two Dozen in a Box, with Screws. Cast Iron 1 1/4 x1 3/4 in. Per Dozen No. B3184—Antique Copper.....\$1.35 1%x1% in. No. EA3184-Dull Brass, Natural Cast Bronze, Polished 1 1/4 x 1 1/4 in. No. No. EA2184—Dull Brass, Natural Color...... 4.00 No. No. A2184—Polished Brass, Natural Color..... 4.00 No. SKA2184—Sanded Brass, Oxidized and Relieved. 4.45 No. E2184—Nickel Plated, Polished...... 4.45 F2184—Genuine Rustless Iron.......... 3.00 No. Weight Per Dozen 1½ Pounds. No. 3184, Three Dozen; No. 2184, Two Dozen in a Box,

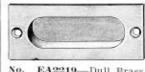
with Screws.

# BAR SASH LIFTS



	Cast Iron	
	1x4 in. Per l	Jozen
No.		80.85
No.	1003290—Altique Conner	0.7
No.	EA03296—Dull Brass, Natural Color,	.85
	ShAU3230 Sanded Brass Oxidized and Relieved	.95
No.	E03296—Nickel Plated	.95
22.0	1 % x5 in.	
No.	and the control of th	1.15
No.	R3296—Antique Copper	1.15
No.	EA3296—Dull Brass, Natural Color	1 15
No.	SKA3296—Sanded Brass, Oxidized and Relieved. Weight Per Dozen 3 Pounds,	1.25
	Cast Bronze, Polished	
	1x4 in.	
No.	B09296—Polished Bronze	4.20
No.	R09296—Antique Copper, Polished	4 20
No.	EA09296—Dull Brass, Natural Color	4 20
No.	A09296—Polished Brass	4 20
No.	SkA09296—Sanded Brass, Oxidized and Relieved	4.45
No.	E09296—Nickel Plated, Polished	4 45
No.	F09296—Genuine Rustless Iron	2.20
	1 % x5 in.	
No.	B9296—Polished Bronze	6.00
No.	R9296—Antique Copper, Polished	6.00
No.	EA9296—Dull Brass, Natural Color	6.00
No.	A9296—Polished Brass	6.00
No.	SKA9296—Sanded Brass, Oxidized and Relieved.	6.65
No.	E9296—Nickel Plated, Polished	6.65
No.	F9296—Genuine Rustless Iron	3.15

# FLUSH SASH LIFTS



No.

Cast Bronze, Polished 1 3% x3 1/4 in. Per Dozen No. B2219 - Polished No. R2219-Antique Copper ..... 5.35 EA2219—Dull Brass, Natural Color...... 5.35 No. SKA2219-Sanded Brass, Oxidized and Relieved. 5.90 F2219—Genuine Rustless Iron..... 4.00 Weight Per Dozen 1 % Pounds. One Dozen in a Box, with Screws.



lieved

Cast Bronze, Polished 1 % x3 in. Per Dozen No. B02226 14 - Polished Bronze ......\$5.90 No. R0222614 - Antique Copper No. EA0222614 — Dull Brass, Natural Color. . 5.90 A0222614—Polished Brass . . . . . . . . . . . . . . . . . 5.90 No. SKA0222634-Sanded Brass, Oxidized and Re-6.35 Weight Per Dozen 1% Pounds. One Dozen in a Box, with Screws



One Dozen in a Box, with Sciews.	
Wrought Bronze, Polished	
1 ½ x3 ¼ in.	
Per Doze	n
No. B2215 - Polished	
Bronze	5
No. R2215 - Antique	
Copper 1.53	5
No. EA2215—Dull Brass.	
Natural Color 1.53	5
o. A2215—Polished Brass 1.58	
o. SKA2215-Sanded Brass, Oxidized and Relieved, 1.75	5
o. F2215—Genuine Rustless Iron 1.20	0
Weight Per Dozen % Pound.	
One Dozen in a Box, with Screws,	

# WINDOW STOP ADJUSTERS

	V///à	Wrough	t Steel	
Con	- Z	1 in. No.	8 Screw.	
(W	Lineman			Per Gross
10	V TOTAL N	o. R0184-Antique	Copper	Pol-
	U369	ished		\$2.80
No.	EA0184-Du	Ill Brass, Natural Co	lor	2.80
No.	SKA0184-Sa	nded Brass, Oxidized	and Reli	eved. 3.20
	Wei	ght Per Gross 1 34 F	ounds.	

Wrought Bronze

	Wrought Bronze	
	1 in. No. 8 Screw.	
No.	B184—Polished Bronze	8.80
No.	R184—Antique Copper, Polished	8.80
No.	EA184—Dull Brass, Natural Color	8.80
No.	A184—Polished Brass	8.80
No.	SKA184-Sanded Brass, Oxidized and Relieved	9.60
No.	F184—Genuine Rustless Iron	3.20
	Weight Per Gross 2 Pounds.	
	One Gross in a Box,	

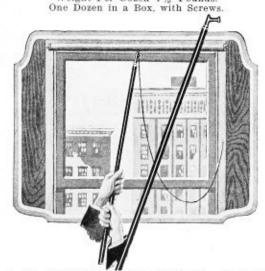
# SASH PULLS



Cast Iron

1 %x4 % in, Per Dozen No. B3287—Bronze Plated

Weight Per Dozen 5¼ Pounds. Cast Bronze, Polished



No. 1—20 Gauge Steel Tubing, Black Enameled, Rubber Bumper

Length, Feet	6 8
Weight Per Dozen, Lbs	24 30
Per Dozen \$	18.00 21.00
Open Stock	

# SASH PULL POLES

Selected Hard Wood

Finished to Match Interior Woodwork in Ash, Natural, Golden, Antique or Flemish Oak, Imitation Mahogany or any Special Finish.

		No. 60	971			
Length, Feet	4	5	6	7	8	9
Wt. Dozen, Lbs	12	13 1/2	15	1736	2.0	2316
Per Dozen	\$4.50	5.00	6.00	7.00	8.00	12.00
Length, Feet,		10	12	14	16	18
Wt. Dozen, Lbs		27			46	5.5
Per Dozen		\$16.00	24.00	32.00	40.00	52.00
		pen S				

# POLE HANGERS



Cast Iron
2 % x1 % in. Per Dozen
No. B3290—Bronze Plated . . . . . . . \$1.32
No. EA3290—Dull Brass, Natural Color. 1.32

Cast Bronzed, Polished

2 % x1 % in.

No. B1290—Polished Bronze ...... 3.48

No. EA1290—Dull Brass, Natural Color 3.48

Weight Per Dozen 1 1/4 Pounds.

# One Dozen in a Box, with Screws. SASH SOCKETS

No.

Cast Iron
1 in. Diameter. Per Dozen
No. B3186½—Bronze Plated......\$1.00
Weight Per Dozen ½ Pound.

Wrought Bronze, Polished



Cast Iron 1 1/2 x2 in.

Per Dozen
No. B3387—Bronze Plated ... \$1.20
No. EA3387—Dull Brass, Natural Color ... ... 1.20

Cast Bronze, Polished

# TRANSOM CHAINS



These Chains can be furnished with a Spring Snap on one end at an additional charge of \$2.40 per dozen.

Wrought Steel 1 % x1 in. Plates.

Prices Per Dozen		
ength, Inches	12	15
o. R0200 1/2 Antique Copper	\$3.10	3.50
o. EA0200 1/2 Dull Brass	3.10	3.50

Wrought Bronze, Polished 1 % x1 in. Plates.

Prices Per Dozen

	Length,	Inches -
Length, Inches	12	15
No. EA200 1/2 - Dull Brass	88.70	9.00
No. A2001/2-Polished Brass	8.70	9.00
No. E200 1/2 - Nickel Plated	9.90	10.20
Weight Per Dozen, Lbs One Dozen in a Box, with	2 1/4	2 1/6

# TRANSOM CATCHES



Cast Bronze, Polished

# TRANSOM CATCHES



Cast Iron, Mallcable Iron Ring 1 % x2 ½ in.

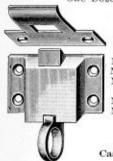
#### Cast Bronze, Polished

1 % x2 1/2 in.

Note-Furnished with Box Strike at the Same Price.

Weight Per Dozen 5 % Pounds.

One Dozen in a Box, with Screws.



#### Cast Iron

1 14 x2 1/8 in.

Weight Per Dozen 3 Pounds.

# Cast Bronze, Polished

1 14 x2 1/8 in.

	Per Dozen
No.	B02278½—Polished Bronze
No.	R02278 1/2 —Antique Copper, Polished 10.00
No.	EA02278 1/2 - Dull Brass, Natural Color 10.00
No.	A02278½—Polished Brass 10.00
No.	SKA0227812-Sanded Brass, Oxidized and Re-
	lieved 11.10
No.	E0227812—Nickel Plated, Polished 11.10
No.	F022781/2 — Genuine Rustless Iron 8.00
N	Note-Furnished with Box Strike at the Same Price.

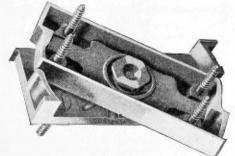
Weight Per Dozen 31/4 Pounds.

One Dozen in a Box, with Screws.



Illustration to the left shows Box Strike furnished with any of the above Transom Catches when so ordered.

# FRICTION SASH CENTERS



#### Iron, Dead Black

Nos	140	141	142	143
For Sash, Inches		1%	2	2 1/4
Weight Per Set, Lbs	2	2 1/2	2 %	3
Per Set	\$1.00	1.15	1.40	1.70

Friction Sash Centers may be used on either side or vertically pivoted sash. They automatically hold sash open at any angle.

One Set in a Box, with Screws.

# SASH OR TRANSOM CENTERS



Cast Iron

	Plates %x2 % in. Per Dozer	Sets
No.	C1303—Coppered	1.35
Vo.	K1303—Antique Copper, Polished	2.75
No.		2.75
	Weight Per Dozen Sets 4 1/4 Pounds.	

Plates 1x2 % in.

No.	C01303	-Coppered	2.40
No.	101303	-Antique Copper, Polished	4.40
No.	EA01303-	-Dull Brass, Natural Color,	4.40
	Wei	ght Per Dozen Sets 7¼ Pounds.	

Plates 114 v2 34 in

	Plates I % x3 % in.	
No.	coppered	3.35
No.	K1304—Antique Copper, Polished	5.75
No.	EA1304—Dull Brass, Natural Color	5.75
	Weight Per Dozen Sets 11 1/4 Pounds.	

Cast Bronze, Polished

No.	B1303 1/2 - 7/8 x2 3/8 in. Plates, Polished Bronze.	19.20
	Weight Per Dozen Sets 4 % Pounds.	
No.	B0130312-1x2 % in. Plates, Polished Bronze,	
	Weight Per Dozen Sets 8 1/4 Lbs	26.40
No	P19041/ 11/-02/ (- PI-1 - P-1)	

#### Cast Iron

Per Dozen Sets
No. C1310—1½33 in.
Plates, Coppered. \$3.20
Weight Per Dozen Sets
10½ Pounds.
One Dozen Sets in a Box,

with Screws.



# Cast Iron

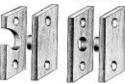
Per Dozen Sets
No. J1331 ½ — 1½ x
2¾ in. Plates,
Weight Dozen Sets
11 Pounds.
Japanned ...\$4.80

Cast Bronze

Per Dozen Sets

No. B1331—1½ x2¾ in. Plates, Polished Bronze...\$29.35 Weight Per Dozen Sets, 13½ Pounds. No. 1331½, One Dozen Sets; No. 1331, One-half Dozen

Sets in a Box, with Screws.



#### Cast Iron

No. J1329 — %x2 ¼ in.
Plates, Japanned......\$1.45
Weight Per Dozen Sets 3 ¼
Pounds.

Two Dozen Sets in a Box, with Screws.



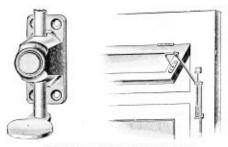
Cast Bronze, Steel Bushed No. B1306—Polished Bronze

Width, Inches	1 %	1 34	2	234
Length, Inches	4	4 1/2	411	5
Weight Dozen Sets, Lbs.	1734	26 1/4	27 %	32
Per Dozen Sets	\$5.55	5.75	6.90	7.75

One-quarter Dozen Sets in a Box, with Screws.

# TRANSOM LIFTERS

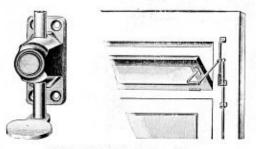
FOR TRANSOMS HINGED AT TOP OR HUNG ON CENTERS



Wrought Steel, Button Grip

	Diam.	4	_		-Each	_	
	Rod,			Ler	gth.	Feet	
Nos.	In.	Finish	3	4	5	6	8
C083	34	Coppered	\$0.55	. 60			
B083	34	Bronze Plated	. 80	. 85			
R083	1/4	Antique Copper	. 80	. 85			
EA083	1/4	Dull Brass	. 80	. 85			
SKA083	1/4	Sanded Brass	. 90	. 95			
C084	To	Coppered		.80	. 95		
B084	Ye	Bronze Plated		1.05	1.20		
R084	Ye.	Antique Copper		1.05	1.20		
EA084	re.	Dull Brass		1.05	1.20		
SKA084	ris.	Sanded Brass		1.20	1.35		
C085	38	Coppered		1.05	1.20	1.40	1.75
B085	3/8	Bronze Plated		1.35	1.55	1.75	2.20
R085	3/8	Antique Copper		1.35	1.55	1.75	2.20
EA085	3/8	Dull Brass		1.35	1.55	1.75	2.20
SKA085	3%	Sanded Brass		1.45	1.65	1.95	2.40

#### FOR TRANSOMS HINGED AT BOTTOM



Wrought Steel, Button Grip

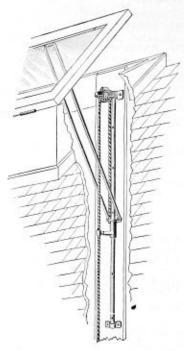
Particularly adapted for transoms hinged at bottom because of spring which acts as a cushion.

	Diam.	**	-	50000	-Each		
	Rod,			Ler	igth,	Feet	
Nos.	In.	Finish	3	4	5	6	8
C093	1/4	Coppered	\$0.85	. 95			
B093	1/4	Bronze Plated	1.05	1.10			
R093	1/4	Antique Copper	1.05	1.10			
EA093	1/4	Dull Brass	1.05	1.10			
SKA093	1/4	Sanded Brass	1.15	1.20	Commence.		
C094	16	Coppered		1.15	1.25	1.45	
B094	10	Bronze Plated		1.25	1.45	1.65	
R094	The	Antique Copper	r	1.25	1.45	1.65	
EA094	16	Dull Brass		1.25	1.45	1.65	
SKA094	750	Sanded Brass		1.35	1.60	1.80	
C095	3/8	Coppered		1.45	1.60	1.80	2.20
B095	3/8	Bronze Plated		1.65	1.90	2.10	2.60
R095	34	Antique Copper		1.65	1.90	2.10	2.60
EA095	3/8	Dull Brass		1.65	1.90	2.10	2.60
SKA095	3/8	Sanded Brass		1.80	2.10	2.35	2.85
C096	1/2	Coppered		2.80	2.95	3.05	3.45

Five in a Package; Coppered, without Screws; Others, with Screws.

# SKYLIGHT OPERATORS

CORBIN



Wrought Steel, Coppered

No. 081—36 in. Diam. Rod

Length, Inches. 18 Wt. Each, Lbs. 1% Each . . . . . . 84.00

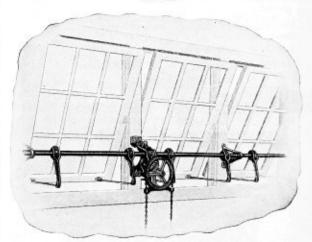
Length, Inches. 24 Wt. Each, Lbs. 2 1/8 Each . . . . . . \$4.40

No. 082— $\frac{7}{16}$  in. Diam. Rod

Screws or Rope not Included.

# SASH OPERATORS

IDEAL



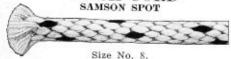
The Ideal Operator (Chain Control) is more widely used than any other type of Sash Operating Mechanism, it consists mainly of a worm and gear control, is self-locking at all points—horizontal shafting of varying sizes from ¾ to 1½ in., on which are clamped drop forged steel levers attached by connecting rods and sash plates to the sash.

A large number of slightly varying types of control (worm and gear powers) have been developed which enables us to meet the peculiar and varying conditions which are often confronted, there being often, on the same job, several types required.

Note-Prices on Request or Receipt of Specifications.

We are Prepared to Furnish Operators for all Conditions.

# SASH CORD





Extra Quality	Cotton Yarn	because the second	
In 100 Foot Hanks, Se	old on Net	Weights.	
Size Nos 6	7	8	9
Diameter, Inches	70	1,4	.9.
Aver. No. Feet to Lb 66		4.4	36
For Weights, LbsLess th	an 5 5 to 12	12 to 20	
App. Weight Dz. Hanks,		121020	200000
Lbs 18	2.2	2.7	3.3
Per Pound \$			
Size Nos			16
Diameter, Inches	5.	36	1,6
Aver. No. of Feet to Lb	27	78 2.0	11
For Weights, Lbs	30 to 40	40 to 50	
App. Weight Per Dz. Hanks, L	bs. 44	60	108
Per Pound	8	3.0	100
*	4,		

# Hard Braided, White Cotton In 100 Ft. Hanks, Sold on Net Weights. Size Nos. . . . . . 6 7 8 9 10 12 16

# WIRE SASH CORD

# 

Composed of 6 Strands and a Cotton Center, 7 Wires to the Strand Iron, Bright

	I	ron, Bri	ght			
Nos	29	2814	28	2714	27	26
Diam., Inches	र्गत	22	1/8	rle.	72	14
Break, Strength,		0.0		10	3.3	1.4
Lbs		510	790	1417	1809	2200
Wt. Ft., Lbs	.006	.014	.025	.056	.076	.100
Per Foot						
		n, Galva			/4	
Nos	29G	2814 G		27 14 G	27G	26G
Diam., Inches	र्गेट	32	1/8	35	2/2	1/4
Break. Strength.					0.2	/*
Lbs		510	790	1417	1809	2200
Wt. Ft., Lbs	.006	.014	.025	.056	.076	.100
Per Foot	80.0134	.02	.0214	.03		
		pper, Bi				
Nos	29C	2814 C	28C	27 14 C	27C	26C
Diam., Inches	Ter.	12	1/8	rie.	272	1/4
Break. Strength,					0.2	7.00
Lbs	140	272	435	792	1022	1265
Wt. Ft., Lbs		.016				.115
Per Foot		. 03 14			. 07 16	
Annealed Cor						
						0.752

# CABLE CHAIN



				-	
	Steel				
Nos	75	40	30	10	110
Length Link, Inches.	76	78	18 50	5/8	34 7.7
Wt. Per Reel, Lbs	36	41	50	5.5	77
Per Foot	\$0.15	.09	.10	. 14	.17
	Coppe	r			
Nos	75B	40C	30C	10C	110C
Per Foot	\$0.23	.22	.26	.28	.45
No. 75B is Made of	Brass; N	os. 75	and 75B	are I	Ised as
Bell Hanger Chain.					
Nos. 75 and 75B, 500	Feet; O	thers 2	50 Feet	on a	Reel.

# SASH CHAIN



Steel, Coppered

Made of Cold Rolled Steel and Strictly High Grade in Every Respect. Gauge ....... .028 .032 .042 .054 For Sash (Not Over), Lbs. . . . . . . . . 100 150 250 400 Weight Per Reel, Lbs. 20 32 4.8 Per Foot ..... 80.04 .06 .08 . 11 Steel, Galvanized 0 Gauge .028 .032 .042.054 For Sash (Not Over), Lbs. . . . . . . . . . . . . . . . 100 150 250 400 Per Foot ..... 80.05 .07 .09 .12

Red Metal

"Red Metal" Sash Chain is Made from a Special Bronze Mixture. Universally Used. .028 .054 For Sash (Not Over), 100 225 300 150 Weight Per Reel, Lbs. 24 2.9 35 55 Per Foot ..... \$0.06 .08 .10 .13

Giant Metal

Made from a Special Bronze Mixture which has no Equal. Used in All Government Buildings.

Nos	0	2	1	A
Gauge	.028	.032	.042	.054
For Sash (Not Over),				
Lbs	125	175	275	400
Weight Per Reel, Lbs.	25	31	36	57
Per Foot	\$0.08	. 10	. 12	. 15

500 Feet on a Reel.

# SASH CHAIN FIXTURES



Hook.



Iron.

Complete Sets

Suitable for use with Nos. A, 1, 2 or 0 Sash Chain. One Set is required for a window of two sashes.

Weight Per Carton 8 Pounds. 25 Sets in a Paper Carton.



Complete Sets

Per Set

# SASH WEIGHTS



Cast	Iron.	Round

Sash Weights—3 to 25	Lbs					Pound \$
Wt. Each, Lbs 3 Diameter, In $1\frac{1}{2}$ Length, In 7	3 ½ 1 ½ 8		1 1/2		1 1/2	1 1/2
$\begin{array}{llllllllllllllllllllllllllllllllllll$				$8\frac{1}{2}$ $1\frac{1}{2}$ $19$	1 1/2	
Weight Each, Lbs Diameter, In Length, In	10 1½ 22¾	$^{10\frac{1}{2}}_{\overset{1}{2}4}$	11 1¾ 18	1134 134 19	$1\frac{3}{4}$	$^{13}_{^{1}\%}_{^{21}\%}$
Weight Each, Lbs Diameter, In Length, In	14 1 % 23	$^{15}_{^{1}\%}_{^{2}5}$	16 2 20 ½	$\begin{smallmatrix} 17 \\ 2 \\ 22 \end{smallmatrix}$	$\frac{18}{2}$ $\frac{2}{3}$	19 2 24 ½
Weight Each, Lbs Diameter, In Length, In	$\frac{20}{2}$ $\frac{2}{26}$	21 2 27	2 2 28	23 2 29 ½	24 2 30	25 2 32

Note—Slight variations must be expected. Square Iron, Lead and Sectional Sash Weights made to order. Prices on Application.

#### Approximate Weight of Sash Weights Required for the Following Windows, Sizes Listed Are Size of Glass Four Weights Are Required for Each Window

Two Light			Two Light		
Windows	S.S.	D.S.	Windows	S.S.	D.S.
20x24	5	6	30x36	8	9
20x28	6	6	30x40	9	10
20x32	6	7	30x44		10
20x36	6	7	30x48		11
20x40	7	8	32x32	-	9
24x30	6	7	32x36		9
24x32	6	7 8 7	32x38		10
24x36	7	8	32x40		10
24x40	7	8	32x44		11
26x30		7	32x48		12
26x32	6 7 7 7	8 8 7 8	34x34		9
26x34	7	8	34x36	0.00	10
26x36	7	8	34x40	- 1	11
26x40	8	9	34x44		12
26x44	8	9	34x48	1.1	13
26x48	9	10	36x36		10
28x32	7	8	36x38		11
28x36	8	9	36x40		11
28x40	8	9	36x44		12
28x44	9	10	36x48		13
28x48	9	10	40x40		12
30x30	7	8	40x42	1.7	13
30x32	8	9	40x44		13
Four Light		120	Eight Light		
Windows	S.S.	D.S.	Windows		S.S.
10x24	5	6	10x12		5
10x28	6	6	10x14		5
10x32	6	7	10x16		6
10x36	6	7	12x14		6
10x40	7	7 7 8 7 7 8	12x16		6
12x30	6	7	12x18		7
12x32	6	7	12x20		8
12x36	7	8	14x20		9
12x40	7	8	14x24		10
14x32	7	8			
14x34	7	8			
14x36	8	9	Twelve		
14x40	8	9	Light		
14x44	9	1.0	Windows		SS.
14x48	9	10	10x12		6
15x24	6	7	10x14		7
15x28	7	8	10x16		7 8
15x32	7	8	10x18		8
15x36	8	9	10x20		9
15x40	9	10	12x20		9
15x44	10	11	12x24		11

# SASH BALANCES





Side.

Uniform Mortise Type, Iron Case and Face, Steel Coil Spring Face Plate 5 ½ in. Long, 1 ¼ in. Wide, Mortise 3 ¼ in.

Long, 11/4 in. Wide, 3 to in. Deep. BS B10 R6 Sto 10 10 to 12 4 to 6 6 to 8 Length Tape, Inches..... Weight Per Set, Lbs.... 3.0 30 34 3.8 5 34 6 1/4 5 14 5 1/2 2.20 2.40 2.60 Per Set of Four..... \$2.00 R18 B20 B16 14 to 16 16 to 18 18 to 20 Length Tape, Inches.... 46 44 Weight Per Set, Lbs.... 6 14 6 1/2 7 1/2 7 1/2 Per Set of Four...... \$2.80 3.00 3.20 3.40 Reg B29 **B32** 23 to 26 26 to 29 29 to 32 5.0 Length Tape, Inches. . . . . 50 52 52 Weight Per Set, Lbs.... 8 8 14 8 1/2 9 

Long, 17 in. Wide, 41 in. Deep. C29 29 to 32 26 to 29 Length Tape, Inches.... 50 52 5.0 5.2 Weight Per Set, Lbs.... 8 1/2 8 8 14 9 4.75 Per Set of Four..... \$4.00 4.25 4.50 C35 C38 C41 C44 For Sash, Wt. Ea., Lbs., 32to35 35 to 38 38 to 41 41 to 44 Length Tape, Inches..... 54 54 54 54 Weight Per Set, Lbs.... 11 13 16 14 1636 Per Set of Four..... \$5.50 5.75 6.00 6.25 C50 C53 C56 47 to 50 50 to 53 53 to 56 Length Tape, Inches.... 5.0 50 5.0 5.0 Weight Per Set, Lbs.... 16 34 17 1734 1736

Face Plate 8 % in. Long, 1 % in. Wide, Mortise 5 % in. Long, 1 % in. Wide, 5 % in. Deep. Length Tape, Inches..... 5.0 5.0 5.0 50 Weight Per Set, Lbs.... 26 1/2 26 % 26 % 27 Per Set of Four..... \$9.00 9.40 9.80 10.20 D68 D71 For Sash, Wt. Ea., Los., 50 Length Tape, Inches, 50 65 to 68 68 to 71 50 50 50 Weight Per Set, Lbs.... 27 1/2 27% 28 Per Set of Four..... \$10.60 11.00 11.40 11.80 D75 D78 D81 71 to 75 75 to 78 78 to 81 Length Tape, Inches..... 50 50 50 Weight Per Set, Lbs..... 28 14 28 1/9 28 % Per Set of Four..... \$12.20 12.60 13.00 D84 D87 D90 81 to 84 84 to 87 87 to 90 Length Tape, Inches..... 50 50 50 Weight Per Set, Lbs..... 29 29 14 29 1/9 Per Set of Four..... \$13.40 13.80 14.20 Length Tape, Inches..... 50 50 50 Weight Per Set, Lbs..... 29 % 30 30 34 Note-Top Balances furnished when ordered at same

price. Prefix 0 to number to indicate top balance.

One Set in a Box, with Screws.

# SASH PULLEYS



# Wrought Steel, Cone Bearing

The Automatic Saw-Tooth Fastening Device Reduces Labor Cost.

Simply drive the pulley in the mortise in the usual way—the saw teeth hold it securely.

No counter-boring for face plate, no cutting or trimming. Weight Per Dozen 1½ Pounds.

Open Stock.



#### Cast Iron

Per Dozen

No. 121½—2 in. Wheel,  $\frac{1}{16}$  in. Axle,

4x1 in. Front, Round Groove for  $\frac{1}{16}$  in. Cord, Plain Finish......\$1.26

Weight Per Dozen 4% Pounds.

Open Stock.





#### Cast Iron

No. 7½—Lacquered Front, Polished Wheel, Grooved for Chain or Cord.

Size Wheel, Inches Front, Inches Axle, Inches Weight Dozen, Lbs Per Dozen	$\begin{array}{c} 2\\ 4 \% \times 1 \%\\ \frac{1}{4}\\ 6 \%\\ \$ 2.40 \end{array}$	2 1/4 5 1/2 x1 1/8 10 1/2 2 . 90
Size Wheel, Inches Front, Inches Axle, Inches Weight Dozen, Lbs Per Dozen		$\begin{array}{c} {\bf 3} \\ 6 \frac{1}{2} \times 1 \frac{\tau}{16} \\ \frac{\tau}{16} \\ 15 \\ {\bf 5 \cdot 20} \end{array}$

One Dozen in a Box.



#### Cast Iron

No. 0111/2-Plain Front, Round Groove.

Size Wheel, Inches	2	214	2 1/2
For Cord, Inches Front, Inches	4 % X1	5x1 1/4	5 % x1 %
Axle, Inches	10	6 14	1/4
Weight Dozen, Lbs. Per Dozen	\$1.30	1.80	2.20

No. 0111/2



No. 011

#### Cast Iron

No. 011-Plain Front, Round Groove.

Size Wheel, Inches	2	236	236
For Cord, Inches		3/8	3/8
Front, Inches	4 7 x1	4 % x1	5 1/2 x 1 1/6
Axle, Inches	16	1/4	1/4
Weight Dozen, Lbs.		6 1/4	8
Per Dozen	\$1.30	1.80	2.20

Open Stock.

# SASH PULLEYS



Cast Iron, Plain Bearing Round Groove for Chain or Cord. No. Y609R—Amber Bronzed, Galvanized Wheel

Size Wheel, Inches.	2	234
Front, Inches	4 1/2 x 1 7/a	5 1/4 x 1 1/8
Wt. Dozen, Lbs	6 1/2	10 1/4
Per Dozen	83.60	4.40
Size Wheel, Inches.	2 1/2	3
Front, Inches	5 % x1 ¼	6x1 %
Wt. Dozen, Lbs	1234	15
Per Dozen	\$5.20	6.80

#### No. B699R—Bronzed Plated, Galvanized Wheel

Size Wheel, Inches.	2	234
Per Dozen	85.20	6.00
Size Wheel, Inches.	234	3
Per Dozen	86.80	8.40

#### Cast Iron, Roller Bearing

Round Groove for Chain or Cord.

No. Y1609R-Amber Bronzed, Galvanized Wheel

Size Wheel, Inches.	2	234	21/2	3
Front, Inches	4 1/2 x1 1/a	5 1/4 x 1 1/8	5 % x1 1/4	6x1 %
Wt. Dozen, Lbs	6 1/4	9 1/4	10 %	13 14
Per Dozen	\$4.80	5.60	6.40	8.00

#### Wrought Bronze, Roller Bearing Round Groove for Chain or Cord.

No. B1609 ½ R—Polished Bronze, Galvanized Wheel

Size Wheel, Inches.	2	214	236	3
Front, Inches	4 1/2 x 1 /a	5 1/4 x 1 1/8	5 % x1 1/4	6x1 %
Wt. Dozen, Lbs	7	9 3/4	11%	16
Per Dozen	\$7.60	8.40	9.20	10.80

One-half Dozen in a Box, with Screws.

# SIDE SASH PULLEYS



Cast Iron Grooved for % in. Chain.

No. 98-Japanned

Size Wheel, In . 2 2½
Wt. Doz., Lbs. . 4¼ 6¾
Per Dozen.....\$3.00 4.40

One Dozen in a Box.

# HOT HOUSE PULLEYS





3 No. 1747

No. 1743-Single Wheel, Japanned

110. 1110			
Size Wheel, Inches	1 34	2	232
For Rope, Inches	14.	10 14	3% 1634
Weight Per Dozen, Lbs	82.80	3.60	5.80
Per Dozen	32.80	3.00	0.00

Cast Iron

21/2 in., One-half Dozen; Others, One Dozen in a Box,

No. 1747—Double	Wheel,	Japanned	
Size Wheel, Inches	134	2	2 1/2
For Rope, Inches	14	าซี	3/8
Weight Per Dozen, Lbs	10	13 %	23 1/4
Per Dozen	85.35	5.40	8.60

1% in., One Dozen; Others, One-half Dozen in a Box.

# CEILING PULLEYS



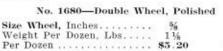
Cast	Iron		
No. 1666-	-Japanne	d	
Size Wheel, Inches	1 34	2	2 16
For Rope, Inches	14	70	3/8
Weight Per Dozen, Lbs	6	8	11%
Per Dozen	\$2.00	2.85	3.85
One Dozen	in a Bo	X.	



# SWING PULLEYS

Cast Brass

			a second		
No.	1670-8	Single	Wheel	, Polished	E
Size Wheel,	Inches.			96	34
Weight Per	Dozen,	Lbs		14	3/4
Per Dozen .				\$3.35	4.00
	Three	Dozen	in a	Box.	~
0					

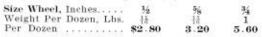


Three Dozen in a Box.



#### No. 1680 SIDE PULLEYS

No. 1673—Wrought Brass, Polished



Three Dozen in a Box, with Screws.



Cast Iron

No. 1770—Single	Wheel,	Japann	ed	
Size Wheel, Inches 34	1	134	1 14	1 34
For Rope, Inches	1/4	1/4	1/4	1/4
Weight Dozen, Lbs 11/4		2 1/4	2 1/4	3 1/4
Per Dozen			1.40	2.00
Size Wheel, Inches	2	214	3	4
For Rope, Inches		34	70	56
Weight Dozen, Lbs	4 1/2	7.5%	1234	3316
Per Dozen	82.10	3.20	4.65	11.20
34 to 1 34 in., Two Dozen; 2 in	n., One	Dozen:	2 1/2 an	d 3 in
One-half Dozen; 4 in., One	-quarte	r Dozen	in a I	3ox.



Cast Iron No. 1771-Double Wheel, Japanned Size Wheel, In . . 134 1 1/2 For Rope, In . . . 14 Wt. Dozen, Lbs.. 2 4 14 Per Dozen . . . . \$2.00 2.35 2.80 3.35 4.00 7.20 2 1/2 in., One-half Dozen; 2 in., One Dozen; Others, Two Dozen in a Box.

# UPRIGHT PULLEYS



Cast Brass

Per Dozen No. 1674-% in. Wheel, Polished .... \$3.70 Weight Per Dozen 34 Pound.

Three Dozen in a Box, with Screws.

#### Cast Iron

No. 1790—Japanned	
Size Wheel, Inches	2 % 3 % 2.00
Size Wheel, Inches.         2½           For Rope, Inches.         3/8           Weight Per Dozen, Lbs.         5 1/6           Per Dozen         \$2.55	3 734 4.00
2 1/2 in., One Dozen; Others, Two	Dozen

in a Box.



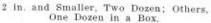
# SCREW PULLEYS

#### Cast Brass

Cust In uss	
No. 1651—Single Wheel, Polished	
Size Wheel, Inches.       ½         For Rope, Inches.       ½         Weight Per Dozen, Lbs.       %         Per Dozen       \$2.40	5% 1% 1 2.80
Size Wheel, Inches	1 11/4 4.00

Cast Iron, Wrought Steel Screw

ngle Wh	eel, Japar	ned
34	1	1 14
	54 45	11/4
80.70	. 75	.85
1 1/2	1 34	2
	Ye	10
1 1/2	2 1/4	2 1/6
\$1.00	1.20	1.35
216	3	4
36	Yes.	5/4
4 1/4	6 14	1734
\$2.00	3.00	7.10
	34 16 18 80.70 114 34 114 81.00 214 38 414	15 14 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19







Cast Iron, Wrought Steel Screw

Per Dozen No. 1726-1% in., Double Wheel, Japanned, for fi in. Rope. . \$2.20

Weight Per Dozen 4 Pounds.

One Dozen in a Box.

# SCREW PULLEYS



Cast Iron, Wrought Steel Screw

No. 1662-Incased, Japanned

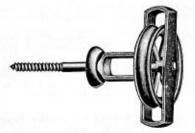
Size	Wheel, In	134	1 1/2	1 34	2	21/2	3	4
For	Rope, In	1/4	1/4	10	10	36	70	5%
	Dozen, Lbs.							221/2
Per	Dozen	\$1.80	1.85	2.00	2.10	3.00	4.00	12.00
	4 in., One-thi	rd Doze	n: Ot	hers. (	One Do	zen in	a Bo	X.



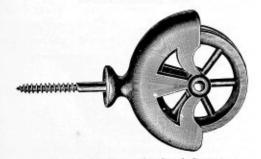
Cast Iron, Wrought Steel Screw.

No. 1663—Incased, Japanned

Size Wheel, Inches 11/2	2
For Rope, Inches	16
Weight Per Dozen, Lbs 2 1/4	4
Per Dozen	2.80
One Dozen in a Box.	



Cast Iron, Wrought Steel Screw



Cast Iron, Wrought Steel Screw

No. 1730—Inc	ased, Japa	unnea	
Size Wheel, Inches	2	2 1/2	3
For Rope, Inches Weight Per Dozen, Lbs	4 1/4	3 <u>%</u> 7 3 <u>4</u>	8 34
Per Dozen One Dozen	\$2.80 in a Bo	3.60 x.	4.80

# AWNING PULLEYS

Cast Iron

No. 1758—Single Japa	Wheel,	Solid	Eye,
Size Wheel, Inches. For Rope, Inches. Weight Dozen, Lbs. Per Dozen	1/2 1/8 1/8 80.60	96 1 1/4 75	34 1 % . 85
Size Wheel, Inches. For Rope, Inches. Weight Dozen, Lbs. Per Dozen	1 1/4 2 \$0.95	1 34 34 2 36 1 . 20	1 1/2 1/3 4 1 . 50
Size Wheel, Inches. For Rope, Inches. Weight Dozen, Lbs. Per Dozen		$\frac{2}{\sqrt{e}}$ 9 $\frac{3}{4}$ 2 . 95	21/2 5/8 17 5 - 40

No. 1758 1/2 - Single Wheel, Solid Eye, Galvanized

Size, Wheel, Inches 1/2 Per Dozen \$0.90		$^{94}_{1.15}$		$\frac{134}{1.60}$
Size Wheel, Inches				
Per Dozen	\$2.05	2.85	3.55	6.10

1½ in. and Smaller, One Dozen; Others, One-half Dozen in a Box.



Cast Iron No. 1759-Double Wheel, Solid Eye, Japanned Size Wheel, In . . For Rope, In . . . Wt. Dozen, Lbs., 2 1/2 2 1/2 Per Dozen ..... \$1.30 1.50 1.85 Size Wheel, Inches.... 1 34 For Rope, Inches..... 1 2 34 Weight Dozen, Lbs.... Per Dozen ..... \$2.60 4.00 21/2 Size Wheel, Inches.... For Rope, Inches..... 26 14 Weight Dozen, Lbs.... 16 14 Per Dozen ..... \$5.20 8.60

 No. 1759½—Double Wheel, Solid Eye, Galvanized

 Size Wheel, Inches
 4
 1
 1½
 1½

 Per Dozen
 \$1.65
 2.00
 2.45
 3.45

 Size Wheel, Inches
 1¾
 2
 2½

 Per Dozen
 \$4.40
 6.40
 10.65

1½ in. and Smaller, One Dozen; Others, One-half Dozen in a Box.



Cast Iron, Malleable Iron Eye
No. 1768—Single Wheel, Swivel Eye,
Japanned

Size Wheel, Inches ½ For Rope, Inches ½ Weight Per Dozen, Lbs. ‡	98 17 1 1/4
Per Dozen \$0.80	.90
Size Wheel, Inches 34 For Rope, Inches 15	1/4
Weight Per Dozen, Lbs. 11/2	2
Per Dozen \$1.00	1.15
447 497	

 Size Wheel, Inches.
 1¼
 1½
 1¾
 2

 For Rope, Inches.
 ¼
 ½
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No. 1768 ½—Single Wheel, Swivel Eye, Galvanized

Size Wheel, Inches Per Dozen		1.10	1.35	1 1,60
Size Wheel, Inches Per Dozen	1 34 \$2.00	1 1½ 3.00	1 3/4 4 · 40	$\frac{2}{5.35}$
	Donne	Othors	One half	Dogen

1½ in and Smaller, One Dozen; Others, One-half Dozen in a Box.

# AWNING PULLEYS



Cast Iron, Malleable Iron Eye

No. 1769—Double Wheel, Swivel Eve.

Japar	ned		
Size Wheel, Inches.	1/2	58	$^{rac{34}{16}}$ $^{rac{24}{16}}$ $^{24}$ $^{1.65}$
For Rope, Inches	1/8	1%	
Weight Dozen, Lbs.	1 1/8	1%	
Per Dozen	81 .45	1.55	
Size Wheel, Inches.	1	1 1/4	1 1/2
For Rope, Inches.	¼	1/4	16
Weight Dozen, Lbs.	3	4 1/8	6 8/8
Per Dozen	\$1.90	2 . 40	3 . 55
Size Wheel, Inches For Rope, Inches Weight Dozen, Lbs Per Dozen		134 36 1036 85.20	2 13 ¾ 6 · 70

No. 1769 1/2 - Double Wheel, Swivel Eye, Galvanized Size Wheel, Inches.... 1/2 2.20 2.55 Size Wheel, Inches.... 114 Per Dozen ..... \$3.35 4.45 6.40 7.40 11/2 in. and Smaller, One Dozen; Others, One-half Dozen in a Box.

# CLOTHES LINE PULLEYS



Cast Iron

Per Dozen No. 1780 1/2 -- 1 1/4 in. Wheel, Galvanized...... Weight Per Dozen 3 % Pounds. One Dozen in a Box.



Cast Iron, Malleable Iron Eye

No. 17331/2-Swivel Eye, Galvanized

Size Wheel, In. 21/2 Wt. Dozen, Lbs. 7% 91/2 Per Dozen . . . . \$4.00 5.35

One Dozen in a Box.

Cast Iron, Malleable Iron Eye

Per Dozen No. 1732 12 -- 2 1/2 in. Wheel. Swivel Eye, Galvanized . . \$4.95

Weight Per Dozen 7% Pounds.

One Dozen in a Box.

# DUMB WAITER PULLEYS

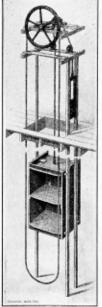


Cast Iro	m

Nos	103	107	108
Size Wheel, Inches		4	5
For Rope, Inches	1/2	54	56
Front, Inches	6x1 %	8 % x2 1/2	9 ¼ x2
Weight Per Dozen, Lbs	15	24	30
Per Dozen		13.00	22.00
No. 103. One Dozen: Other	s One-third	Dozen in a	Package

# DUMB WAITER OUTFITS

SEDGWICK AUTOMATIC BRAKE



The Sedgwick Automatic Brake Dumb Waiter Machines are a great improvement over all Automatic Lock and other Self-retaining Machines, and are especially designed for purchasers who consider just as carefully What They Are Getting, as what they are paying.

The Automatic Brake is independ-ently supported, thus relieving the machine of all end thrust, strain, and unnecessary wear.

The Brake does not lock fast, but is applied and regulated by the load. holding the car securely at any point, allowing it to be raised and lowered smoothly and easily without the jumping and jarring common to all other Automatic Dumb Waiters.

The capacity given below is based on what a pull of 10 pounds on the Hand Rope will lift.

These outfits are amply strong for occasional or test loads of double the capacity given.

Steel Shafting, Anti-friction Roller Bearings

Prices given below are for Complete Outfits 20 ft. Over All or Less.

	Single 1	ace		
Nos	1	2	3	4
Diam. Hand Wheel, In.		20	24	3.0
Width Car, Inches		24	28	34
Depth Car, Inches		20	24	3.0
Space Required, Inches	23x19	27x23	31x27	37x33
Capacity, Lbs	20	25	3.0	40
Shipping Weight, Lbs.	250	300	350	450
Each	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	100.00	120.00	140.00
Per Foot	.69	.70	.75	.80

#### Double Face

Double Face Fixtures require a Longer Shaft, Extra Hand Wheel and Hand Rope.

Nos	1	2	3	4
Triana diana wheel, In.	16	20	24	3.0
Width Car, Inches		2.4	28	3.4
Depth Car, Inches		20	24	3.0
Space Required, Inches		27x24	31x28	37x34
Capacity, Lbs	20	25	30	40
Shipping Weight, Lbs.	300	350	400	500
Each		112.50	135.00	160.00
Add for Extra Height,		112.00	100.00	160.00

Note-We can furnish complete Dumb Waiter Outfits for all requirements. Prices on Request and Receipt of Specifications.

# SASH ROLLERS



#### No. 593-Cast Iron, Japanned

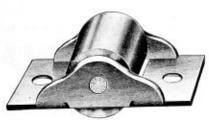
Size, Inches	1	1 1/4	1 1/2
Case, Inches	1x3	1 1/4 x 3 1/4	1 1/2 x 3 7/8
Diameter Wheel, Inches.	1 1/4	1 1/2	1 %
Weight Per Dozen, Lbs	3 1/4	5 1/4	8
Per Dozen	\$1.10	1.50	2.20
One Do	zen in a	Box.	



#### No. 594-Cast Iron, Japanned

Size, Inches	96	34	74	1	1 14
	5% x1 1/2	% x1 %	% x2	1x2 1/8	1 14 x 2 14
Diam. of Wheel, In.	5%	56	3/4	7/8	1
Wt. Per Dozen, Lbs.	5/8	7/8	1 Pa	1 5%	1 11
Per Dozen	\$0.46	.57	.73	.88	1.05
S	ix Dozer	in a B	ox.		

No. 59414 -Cast Brass, Polished, Wrought Brass Wheel Size, Inches . . . . . . . 5% % x1 ½ % x2 1x2 1/8 Case, Inches ..... % x1 % 1 14 x 2 14 Diam. of Wheel, In. 3/4 1 1 1/8 Wt. Per Dozen, Lbs. \$2.20 2.65 3.60 4.15 5.05 Per Dozen ..... Two Dozen in a Box, with Screws.



# No. 17059-Wrought Steel

Size, Inches	56	34	1
Case, Inches	% x1 1/2	% x1 %	1x2
Diameter of Wheel, Inches.	18	56	3/4
Weight Per Dozen, Lbs	98	18	1 %
Per Gross	\$9.84	12.00	15.84
One-quarter	Gross in a	Box.	

# DOUBLE ROLLERS



# Wrought Steel, Nickel Plated

For use on all Glass Sliding Doors that are made without frames. Per Dozen

No. 17062—12x2 % in. Frame, 1 in. Diameter Fibre Roller with Brass Bushings, with Anti-Friction Center Guide to Prevent Door from Striking...\$5.00

Weight Per Dozen 17s Pounds.

One Dozen in a Box.

# SHUTTER SHEAVES



Weight Per Dozen 7 Pound. Two Dozen in a Box.



Cast Iron, Japanned

Per Dozen

No. 752—1¼ in. Polished Wheel, %x2½ in. Face, for Use with Nos. 990¼, 990½ or 991½ Track. \$2.15

Weight Per Dozen 1½ Pounds.

One Dozen in a Box.

Cast Brass, Polished

Per Dozen

No. 75234—1¼ in. Turned Wheel, %x2½ in. Face, for Use with Nos. 990¼, 990½ or 991½ Track.\$8.00

Weight Per Dozen 1¾ Pounds.
One Dozen in a Box, with Screws.



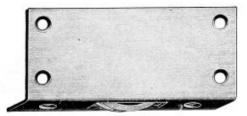
Cast Iron Japanned

Per Dozen



Cast Iron, Japanned

Per Dozen



Wrought Steel, Ball Bearing

Per Dozen

One Dozen in a Box.

# SLIDING DOOR SHEAVES



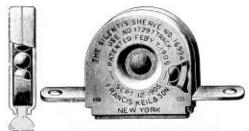
Wrought Steel, Ball Bearing Per Dozen No. 16998—Wrought Steel Throughout, Hardened Steel Balls, Case 11 in. Thick, Made to Drive in, for Use with No. 17297 Track......\$2.10 Weight Per Dozen 11/4 Pounds. Three Dozen in a Box.



Wrought Steel, Ball Bearing No. 1699812-Wrought Steel Throughout, Hardened Steel Balls, Case 32 in. Thick, for Use with No. weight Per Dozen 14 Pounds.
Three Dozen in a Box. 17297 Track



Per Dozen Wrought Steel, Ball Bearing No. 16999-For Heavy Doors, Wrought Steel Throughout, Hardened Steel Balls, Case 1/2 in. Thick, for Three Dozen in a Box.



Wrought Steel, Ball Bearing No. 16994-Wrought Steel Throughout, Hardened Steel Balls, Seamless Steel Roller Tire, Case 3 in. Thick, ......\$1.35



Wrought Steel, Ball Bearing 2 in. Wheel, %x4 % in. Face, % in. Hardened Steel Balls. Per Dozen No. 17028D-For Use with No. 17297 Track ..... \$2.50 No. 17028E-For Use with No. 17298 Track..... 2.50 Weight Per Dozen 1 % Pounds. Three Dozen in a Box.

# SLIDING DOOR SHEAVES



Cast Iron, Roller Bearing No. 9—Japanned Case, Polished Wheel Diameter Wheel, Inches..... 2 1/2 Thickness Wheel, Inches...... 1 1/8 x 6 1 1/4 x7 Face, Inches ..... 3 % 6 Weight Per Set of Four, Lbs...... 89.60 15.20 



Cast Iron, Turned Wheel No. 500-Japanned Diameter Wheel, Inches..... To Run, Inches..... 42

46

1 1/8 x 9 1 1/2 x 11 Face, Inches . Weight Per Set of Four, Lbs..... 6 14 9 1/2 15.20

# SLIDING DOOR TRACK



Wrought Steel, Copper Plated In 8 and 10 ft, Lengths. Per Foot No. 17297-For Use with Nos. 16998, 16998 1/2, 16994 ....80.08 Sheaves

Weight Per 1000 Feet About 175 Pounds. One Thousand Feet in a Case.

Wrought Brass

In Lengths of 2, 3, 4, 5, 6, 7 and 8 Feet. Per Foot No. 990 14 -For Use with Nos. 752, 752 14, 753, 753 14, or 0580 Sheaves..... Weight Per 100 Feet 9 Pounds. Open Stock,



Wrought Steel, Bronze Plated In Lengths of 2, 3, 4, 5, 6, 7 and 8 Feet. Per Foot No. 99112-34 in. Wide, for Use with Nos. 750, 752. 752 %, 753, 753 ¼ and 0580 Sheaves, Weight Per 100 Feet 8 1/2 Lbs..... . . 80 . 11 No. 990—1 1/8 in. Wide, for Use with Nos. 588, 588 1/2, 9 and 500 Sheaves, Weight Per 100 Feet 19 Lbs.

Wrought Brass, Plain In Lengths of 2, 3, 4, 5, 6, 7 and 8 Feet No. 990½—¾ in. Wide, for Use with Nos. 750, 752, 752¾, 753, 753¼ and 0580 Sheaves, Weight Per

.55

#### FAUL/TLESS PIVOT BEARING

#### Short Stem

Practically eliminates all friction. The round headed pivot stem carries the weight at one point, at the end of the stem, resulting in a free easy turning caster.

Compact, well built, strong, rolls easily and smoothly.



"Faultless" Steel Wheel, Brass Plated Horn and Wheel

No. A-7-3—Size Wheel No. 3, 1½ in. Diameter, ½ in. Face, ½ x1 in. Bore, ¾ in. Track Plate, Weight

Six Sets in a Box.

Per Set % Lb......\$0.46

# FAULTLESS PIVOT BEARING LONG STEM



Nos. C-2-4 and C-4-4.



Socket.

%x1% in. bore, with reinforced track plate, % in. diameter.



No. C-6-4

Lignumvitae Wheel, Bright Steel Horn

#### Lignumvitae Wheel, Brass Plated Horn

Nos	C-4-4	C-4-6
Size Wheel, Nos	4	6
Size Wheel, Inches	1 3 x1 %	1 % x1 %
Weight Per Set, Lbs	1/2	3/4
Per Set of Four	\$0.39	. 46

#### "Faultless" Steel Wheel, Nickel Plated Horn and Wheel

Nos	C-6-4	C-6-5	C-6-6
Size Wheel, Nos	4	5	6
Size Wheel, Inches	1 % x 5%	1 1/4 x 1/4	1 % x %
Weight Per Set, Lbs	3/10	34	940
Per Set of Four	\$0.50	.54	910 . 57

One Set in a Box.

#### FAULTLESS PIVOT BEARING

For Wood Beds and Heavy Furniture

ng 1 in. Bore, 1 in. Diameter Track Plate.



#### "Faultless" Steel Wheel, Nickel Plated Horn and Wheel

Nos	D-6-6	D-6-8
Size Wheel, Nos	6	8
Size Wheel, Inches	1 3% x 34	1 % x 34
Weight Per Set, Lbs	1 1/2	1 %
Per Set of Four	\$0.70	. 75

No. D-6-6.

Four Sets in a Box.

#### CASTERS

# FAULTLESS ROLLER BEARING GRIP NECK



Have always proven highly satifactory wherever used. They are strong, neat appearing and simple in construction, with no complicated parts to get out of order and nothing to retard easy movement. They are very accurately manufactured, designed along lines that add beauty to any article on which they are used, easy to swivel and move about.

%x1% in. Bore.

No. RB-6-3.

"Faultless" Steel Wheel, Nickel Plated Horn and Wheel

Nos	RB-6-3	RB-6-4	RB-6-6	RB-6-8
Size Wheel, Nos	3	4	6	8
Size Wheel, Inches	1 1 X 16	1 % x %	1%x%	1%x%
Diam. Track Plate, In	1	1	1 1/4	1 1/4
Weight Per Set, Lbs	34	46	1	1 1/6
Per Set of Four	80.49	. 54	. 69	.79

"Faultless" Steel Wheel, Brass Plated Horn and Wheel

Nos.		RB-7-3	RB-7-4	RB-7-5	RB-7-6	RB-7-8
Size	Wheel, Nos.	3	4	5	6	8
Size	Wheel, In	1 1 x 16	1 % x %	1 14 x 11	1 % x %	1%x%
Dia.	Track Plate,					
Inc	hes	1	1	1	1 14	1 14
Wt. I	Per Set, Lbs.	34	%	910	1	1 1/5
Per 5	Set of Four.	\$0.49	.54	.59	.69	.79

#### Felt Wheel, Brass Plated Horn

Faultless Felt Wheels are made without glue or sizing. The tread is pure felt, scientifically treated to absorb vibration; silent and neat appearing.

No	RB-12-3
Size Wheel, No	3
Size Wheel, Inches	1 1 X 16
Diameter Track Plate, Inches	1
Weight Per Set, Lbs	34
Per Set of Four	\$1.33



No. RB-12-4

Nos	RB-12-6	RB-12-7	RB-12-8
Size Wheel, Nos 4	6	7	8
Size Wheel, Inches 1 1/2 x 5/8	1 % x %	1 ½ x ¾	1 % x %
Dia, Track Plate, In. 1	1 1/4	1 1/4	1 14
Weight Per Set, Lbs. %	940	910	13/10
Per Set of Four \$1.43	1.83	2.08	2.33

One Set in a Box.



#### UNIVERSAL BALL BEARING GRIP NECK

The Universal Type is one of the most popular Ball Bearing Socket Casters and has been on the market for many years.

Constructed of High Grade Steel Throughout with Steel Ball Bearings.

3% x15% in. Bore.

No. 503x26.

# Lignumvitae Wheel, Bright Steel Finish Horn

Nos. Size Wheel, Nos. Size Wheel, Inches Weight Per Set, Lbs. Per Set of Four.	1 16 X 16 38	505x26 5 1 ¼ x †‡ 5% .30	507x26 7 1 % x 18 % .40
	in a Box.	100	

#### STEEL GEM, ROLLER BEARING, GRIP NECK



Standard Socket No. 3, %x1% in. Bore.

Nos	355-B	555-B
Size Wheel, Nos	3	5
Size Wheel, Inches	1 % x %	1 % x %
Weight Per Set, Lbs.		7/8
Per Set of Four		.75
No		755-B
Size Wheel, No		7
Size Wheel, Inches		1 56 x 34

Iron Wheel

One Set in a Box.

RUGBY GRIP NECK

Lignumvitae Wheel, Brass Plated, Bell Shaped Steel Horn

Standard Socket No. 3, 34x1 54 in. Bore.

Nos	3002	5002 5
Size Wheel, Inches. Weight Set, Lbs	1/2	1 % x % %
Per Set of Four	\$0.22	.27
No		7002
Size Wheel, No		7 1 % x %
Size Wheel, Inches Weight Per Set, Lbs.		7/8 X 7/4
Per Set of Four		\$0.35

Six Sets in a Box.



1 1/4

80.90

# DIAMOND VELVET, TOP BEARING

# Red Fibre Wheel, Brass Plated Horn



#### Feltoid Wheel, Brass Plated Horn

To be used on Wood, Tile, Composition or other hard surface floors to protect them against marring or gouging. Standard Socket No. 6, %x1% in. Bore.

DFB Size Wheel, Nos.... 3 Size Wheel, Inches. 115 X 58 5 1 % x % Weight Per Set, Lbs. Per Set of Four... 81.50 1.75 No. FFB

1%x% Weight Per Set, Lbs..... Per Set of Four..... 82.00





DRB

5 1 to x %

1.00

FRB

1%x%

\$1.30

No. BFB.

# CASTERS

# SHENCK PHILADELPHIA PATTERN Lignumvitae Wheel, Bright Steel Horn

The stem is riveted loose through the horn, which is so formed as to give a double bearing.

14 x 1 1/2 in. Stem.

	Nos	32	42
	Size Wheel, Nos		4
1	Size Wheel, Inches.		1 % x %
	Weight Set, Lbs Per Set of Four	\$0.20	.28
and the	No		52
2000	Size Wheel, No		5
	Size Wheel, Inches		1 % x %
100	Weight Per Set, Lbs		5/8
	Per Set of Four		\$0.25

Six Sets in a Box.

#### BASSICK PIANO AND REFRIGERATOR



Extensively used on large refrigerators.

A wood bushing is supplied with No. 6115-B for use in replacing casters with sockets which required a large drilling.

Bushing.

A top bearing design caster, insuring free and easy turning.

#### Feltoid Wheel, Brass Plated Horn Per Set of Four

No. 6115-B-1 % x1 1 in. Wheel, γ<sup>2</sup>εx1 τα in. Bore, 2 ⅓ in. Diameter Plate, Weight Per 

One Set in a Box.



No. 6115-B.



#### Iron Wheel, Steel Horn, Bright

Per Set of Four No. 1111-Long Sockets, 1 % x 17s in. Wheel, 18x17s in. Bore, 21/s in. Diameter Plate, Weight Per Set 31/2 Lbs. ....

No. 2111-Short Socket, 1%x 1 ¼ in. Wheel, ⅓x1 ¼ in. Bore, 2 ⅓ in. Diameter Plate, Weight Per Set 3 ¼ Lbs. ..... 1.40

One Set in a Box.

No. 1111

#### BASSICK TEA WAGON OR BABY CRIB

The "Wizard Swivel" socket has a top point bearing with an inner tube to hold the stem, which allows easy swiveling in the socket.

# Rubber Wheel, Brass Plated

Per Set of Four No. 9436x13-B — 2 in. Diameter Wheel, % in. Bore, Weight 

# Rubber Wheel, Nickel Plated

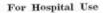
Per Set of Four No. 13436x13-N-3 in. Diameter Wheel, % in. Bore, Weight 

One Set in a Box.



No. 13436x13-N.

#### FAULTLESS PIVOT BEARING



Rolls easily, swivels perfectly in any direction without clatter and unsteadiness. Strong, yet simple, with plenty of metal to stand up and resist strains. Rubber wheels prevent scratching, are silent and neat appearing.



To Oak All Title Teacher	arcter meet	ALC: NO.
Nos	D-17-11	D-17-13
Size Wheels, Nos	11	13
	2 % x 5%	4 % x %
Wt. Per Set. Lbs	$2 \frac{1}{10}$	5
Per Set of Four	\$5.00	7.00
One Set in	n a Box.	

#### BASSICK RUBOID

#### For Office Chairs

Has the Diamond Velvet Socket with fibre bearing at the top. The longest wearing, easiest swiveling socket made. The Ruboid Wheel is made of vertical laminations of seasoned wood held fast by vulcanized rubber. It is the longest wearing, quietest, with easiest traction and lowest cost.

Ruboid Wheel, Gun Metal Finish

No. GWG—2 in. Diameter Wheel,
½ in. Bore, Weight Per Set
1½ Lbs. \$2.75
One Set in a Box.



The balls are standard alloy steel, the race of chrome steel. These parts are galvanized by electro galvanizing process, making them positively rust proof in any climate. Rolled Steel Frame, Hardened Tool Steel Ball Bearings

and Ball Race, Solid Rim Surface Ball.



No. 657.

#### No. 657—Round Plate, Nickel Plated

Size Ball, Inches	34	1
Wt. Per Set, Lbs Per Set of Four	14	% . 70
2017 THE RESERVE		134
Size Ball, Inches Wt. Per Set, Lbs		1
Per Set of Four		. 80
One Set in a	Box.	

Rolled Steel Frame, Stem and Socket, Hardened Tool Steel Ball Bearings and Ball Race, Solid Rim Surface Ball, Stem and Socket,



# No. 659—Grip Neck, Nickel Plated

Size Ball, Inches	34	1
Wt. Per Set, Lbs Per Set of Four	\$0.70	.75
Size Ball, Inches Wt. Per Set, Lbs	1 3/8	1 1/4
Per Set of Four		.85
One Set in a	Box.	

No. 659.

# CASTERS

#### BASSICK FURNITURE SHOE



Steel Base, Nickel Plated

Six Sets in a Box.

No. 185-N.

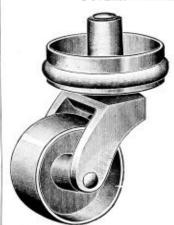
#### Steel Base, Nickel Plated

Six Sets in a Box.



No. 180-N.

#### FOSTER MERRIAM SOCKET



#### ROUND SHALLOW SOCKET

Cast Brass Socket and Horn, Polished

No. 13—Cast Brass Wheel

Dia. Sck., in. 7% 1 Wt, Set, Lbs. 5% 34 Per Set of 4, \$1.25 1.40

Dia. Sck., in. 1½ 1¼ Wt. Set, Lbs. 1 1½ Per Set of 4, \$1.50 1.80

Dia. Sck., in. 1% 1½ Wt. Set, Lbs. 1½ 1¾ Per Set of 4, \$1.90 2.10

Open Stock.

No. 13.

ROUND DEEP SOCKET

Cast Brass Socket and Horn, Polished

No. 19-Cast Brass Wheel

Diam. Socket, in Wt. Set, Lbs Per Set of 4		1 ¾ 1.80
Diam. Socket, in Wt. Set, Lbs Per Set of 4	1 1/8 1 \$2.10	1 ¼ 1 ½ 2.35
Diam. Socket, in Wt. Set, Lbs Per Set of 4		1 1/2 1 1/4 2 . 80

Open Stock.



No. 19.

SQUARE DEEP SOCKET Cast Brass Socket and Horn, Polished No. 25—Cast Brass Wheel

Diam. Socket, In. 78 1 136 134 132 134 Weight Set, Lbs. 58 34 1 136 136 238 238 Per Set of 4... \$2.70 2.80 3.10 3.35 4.00 5.75 Open Stock.

# FAULTLESS ROLLER BEARING METAL BED



The Combination Faultless Roller Bearing Caster with the Faultless Spring Metal Bed Socket gives exceptional service. Its construction is simple and durable.

"Faultless" Steel Wheel, Nickel Plated Horn and Wheel

	Per Set of Four
No.	RBK-6-3-Size Wheel No. 3, 1 1/10
	in. Diameter, 🍰 in. Face, for 🐐
	in. Outside Diameter Round Tub-
	ing, Weight Per Set % Lbs80.55
No.	RBK-6-3-78-For % in. Outside
	Diameter Round Tubing, Other-
	wise Same as No. RBK-6-355

No.	RBL-6-5-Size Wheel No. 5, 11/4 in. Diameter.	
	11 in. Face, for 1 in. Outside Diameter Round Tubing, Weight Per Set 1 Lb	.62
No.	RRM-6-8—Size Wheel No. 8 154 in Diameter	.02

No.	RBM-6-8—Size	Wheel No. 8, 1% in. Diameter,	
	34 in. Face, for	14 in. Outside Diameter Round	
	Tubing, Weight	Per Set 1¼ Lbs	.87
No	RRN-6-8 Size	Wheel No. 8 15/ in Diameter	

No. RBN-6-8-S	size Wheel No.	8, 1% in.	Diameter,	
	, for 1½ in. Ou			
Tubing, We	eight Per Set 1	½ Lbs		92

Nos. RBK-6-3 to RBL-6-5, Six Sets; Nos. RBM-6-8 and RBN-6-8, Four Sets in a Box.

#### "Faultless" Steel Wheel, Nickel Plated Horn and Wheel

	Per Set of Four
No.	RBO-6-8—Size Wheel No. 8, 1 % in. Diameter, % in. Face, for 1 % in. Outside Diameter Round Tubing, Wt. Per Set 1 % Lbs
No.	RBO-6-8-2—For 2 in. Outside Diameter Round Tubing. Otherwise Same as No. RBO-6-8
No.	RBP-6-8—For 2 ½ in. Outside Diameter Round Tubing, Otherwise S am e as No. RBO-6-8

Two Sets in a Box.





#### "Faultless" Steel Wheel, Nickel Plated Horn and Wheel

No. RBR-6-6, Four Sets; Nos. RBS-6-7 and RBT-6-8, Two Sets in a Box.

# CASTERS

#### UNIVERSAL BALL BEARING PLATE



#### Oblong Plate

Steel Plate, Horn, Frame Pin and Heavy Axle, Bright Finish.

For use on boxes, cabinets and various styles of furniture requiring this type of caster.

Sturdily built of the best materials and manufactured for years under constantly improving methods.

#### Lignumvitae Wheel, Bright Steel Finish

Nos	 533x26	535x26
Size Wheel, Nos	 3	5
Size Wheel, Inches	 1 1 x 1/2	1 1/4 x 112
Size Plate, Inches .	 1 1/2 x 1 1/6	1 % x1 1/2
Height, Inches	 1 %	1 %
Weight Per Set, Lbs	 1/2	34
Per Set of Four	 80.23	.30

Six Sets in a Box.

#### STEEL GEM, ROLLER BEARING, PLATE

#### Square Plate

Steel Plate, Horn, Frame Pin and Axle.

Widely known as the leading make of plate casters. Their construction and the quality of their material makes them strong and rugged. For use wherever casters are subjected to hard usage.



#### Feltoid Wheel, Brass Plated

Nos Size Wheel, Nos	477-B	677-B	777-B	877-B
Size Wheel, Inches Size Plate, Inches	1 % x % 1 ½	1%x% 1%	1 % x % 1 %	1 % x1
Height, Inches Weight Per Set, Lbs.	1 18	1 1/4	2 14 1 14	2 1/2
Per Set of Four	\$1.50	2.00	2.50	3.75

One Set in a Box,



# Iron Wheel, Bright Steel Finish

Nos	. 351	551 5	751 7
Size Wheel, Inches Size Plate, Inches	. 1 ½ x 5%	1 A x %	1 % x %
Height, Inches	. 1 %	1 1/2	1 % 2 %
Weight Per Set, Lbs Per Set of Four	80.45	.50	1 1/4
Nos			. 65
Size Wheel, Nos		8	951 9
Size Wheel, Inches Size Plate, Inches		1 % x1 2 %	2x1 2 1/4
Height, Inches		2 1/4	2 14
Weight Per Set, Lbs Per Set of Four		2 1/4 81 . 00	2 % 1 . 10

One Set in a Box.

# BASSICK TRUCK

#### With Bassick Ruboid Wheel

Ruboid Wheels are constructed with laminations of tough sinewy wood held fast in a solid mass of vulcanized rubber. They are formed into solid, long wearing wheels that are acid, oil and water proof. They are rigid enough to roll easily and resilient enough to take the bumps quietly, smoothly and without harm to floors.

#### Harvard Steel Ball Bearing



Heavy Embossed Steel Top Plate reinforced by independent Bearing Cup, Special Annealed King Pin, Heavy Gauge Steel Horn of high tensile strength.

Spanner Bushing strengthens horn preventing its bending inward under weight and binding wheels, gives large bearing surface to wheel.

#### Ruboid Wheel, Bright Steel Finish

Per Set of Four

#### Steel Shaft Bearing

Has the same construction as the No. 13426-W, but with specially designed differential shaft bearings which make easy swiveling under heavy loads.

#### Ruboid Wheel, Bright Steel Finish

Nos	14436-W	16436-W
Size Wheel, Inches	4x13%	6x1 3/4
Length Plate, Inches	5	6 1/2
Width Plate, Inches	4	6
Height Over All, Inches	5 1/4	7.34
Weight Per Set, Lbs	121/4	35 1/2
Per Set of Four	\$10.00	21.50
Open Sto		

#### Steel Stationary Rollers

Heavy Gauge Steel Horn is designed to give strength and absorb shock.

Added strength is obtained by a box construction, the legs of the horn being locked against a spanner bushing which extends between the two legs and through which the axle is riveted.



Ruboid Wheel, Bright Steel Finish

Nos	3386-W	4386-W	6386-W
Size Wheel, Inches		4 x 1 3/8	6x1 3/4
Length Plate, Inches	5	6 1/4	8 1/2
Width Plate, Inches	2 1/2	3 1/8	4 1/2
Height Over All, Inches.	3 %	4 %	7
Weight Per Set, Lbs	5	7 3/4	211/2
Per Set of Four	\$5.75	8.80	16.60
	Open Stock		





Pressed from Heavy Steel to withstand the impact of sudden blows, equipped with hardened, ground and lapped Steel Balls

The Top Plate is deep pressed with a smooth, accurately formed race-way which insures the retention of the ball bearings in their proper position.

#### Cast Iron Wheel, Bright Steel Finish

Nos	108-236	108-3	108-4
Size Wheel, Inches	2 1/2 x 1 1/4	3 1/4 x 1 3/4	4x1 1/2
Length Plate, Inches	3 %	4 1/8	5
Width Plate, Inches	2 %	3 1/4	4
Height Over All, Inches.	3 3/8	3 13	5
Weight Per Set, Lbs	5 %	8 5%	15
Per Set of Four	\$2.00	2.70	5.70

Open Stock.

#### PAYSON ANTI-FRICTION, TRUCK



Small Sizes, for Furniture, Small Trucks, etc.

#### No. 37—Cast Iron Wheel

Size Nos	182	183	184	186
Size Wheel, Inches	1 1/8 x //c	1 % x %	1 % x %	2 x 7/8
Length Plate, Inches.	2	2 %	2 34	3 1/8
Width Plate, Inches	1 %	1 5%	1 %	2 1/8
Height Over All, In	1 3/4	2	2 36	2 %
Weight Per Set, Lbs	1	1 1/2	2 1/4	3 1/2
Per Set of Four	\$0.60	. 75	. 95	1.25

#### Large Sizes for Heavy Trucks

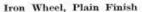
#### Cast Iron Wheel

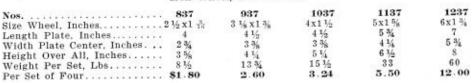
Size Nos 188	190	404	192
Size, Wheel, Inches 2 1/2 x 1 1/4	3x1 3/8	4 x 1 3/8	4x2 14
Length Plate, Inches 4 1/4	4 %	4 34	6 1/4
Width Plate, Inches 3	3 3%	3 %	4 1/4
Height Over All, In 3 1/2	4 1/2	5 34	6
Weight Per Set, Lbs 8	14	20	36
Per Set of Four \$2.75	4.00	7.00	12.00

Open Stock.

#### GEM IRON, ROLLER BEARING, TRUCK

Heavy Cast Iron Plate and Horn with Steel Roller Bearing and Heavy Steel Axle. Top Plate has a Hub cast on, removing all Side Strain from the king and insuring easy swiveling.





Open Stock.





#### BOSS PATENT, TRUCK

Wide Wheel, Soft Rubber Tire Oblong Plate

Disc Bearings, with Spacer to keep Bearings Separated and to prevent Friction.

Nos 388-R	390-R	391-R	392-R
Size Wheel, Nos 8	10	11	12
Size Wheel, Inches 2 1/2 x 7/8	3x1	3 1/2 x1 7/6	4 1/4 x 1 3/6
Length Plate, Inches 4 1/8	4 3/4	5 %	6
Width Plate, Inches 2 %	3 1/4	3 5%	4
Thickness Plate, In 1/4	16	3.3	3/8
Height Over All, In 3 %	4 3/8	5 1/8	5 %
Weight Per Set, Lbs. 914		20 1/4	28 1/2
Per Set of Four \$7.00	10.50	15.00	22.00
Open S	tock.		

#### MARTIN PATENT, TRUCK





Nos. 82 to 112.

Nos. 21 and 31.

#### Iron Wheels, Malleable Iron Castings, Lacquered Bronze Finish Oblong Plate

Nos	82	102	112
Size Wheels, Nos	8	10	11
Size Wheels, Inches	2 1/2 x 3/4	3 1/8 x 3/4	3 % x %
Length Plate, Inches	4 3%	4 3%	5
Width Plate Inches	3 1/4	3 3/4	3 3/8
Height Over All, Inches	3 1/2	4 1/8	5 1/8
Weight Per Set, Lbs	11	13	19
Per Set of Four	\$2.00	2.50	3.75
Open	Stock.		
Rour	d Plate		
Nos		21	31
Size Wheels, Nos		2	3
Size Wheels, Inches			1 % x %
Diameter Plate, Inches			1 5%
Height Over All, Inches		1 1/2	1 %
Weight Per Set, Lbs		1	2
Per Set of Four		\$0.80	.85
One Set	in a Bo	X.	7.0

# RUBBER TIRES

#### FOR BOSS PATENT CASTERS



Inside Dia., In 1 % 2 ½ 2 % Face, Inches % 1 1 ½ 60 Each 80 30 45 60 Open Stock.	Outside Dia., In	2 1/2	3	31/2
	Face, Inches	76	2 1/8	- 78
			. 45	60

# CASTERS

STORE TRUCK

#### STATIONARY

Cast Iron, Japanned



Nos. 20 Size Wheel, In...2%x% 3 % x1 Length Plate, In. 4 % 5 1/8 Width Plate, In... 2 % Hgt. Ov. All, In... 3 ½ Weight Set, Lbs... 1 ½ Per Set of Four... \$2.00 3 1/8 4 1/8 3.10 Open Stock.

#### Extra Heavy Cast Iron, Japanned

Nos. 24 Size Wheel, In. 4x1 1/2 4 1/2 x2 Lgth, Plate, In. 5 % Width Pl., In. 3 % 6 1/8 4 1/4 Ht. Ov. All, In. 41/2 5 Wt. Set, Lbs. 4 1/8 5 1/2 Per Set of 4. . . \$5.10 5.20 Open Stock.



SWIVEL

Cast Iron, Japanned

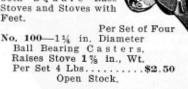


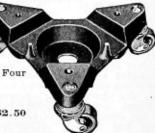
Open Stock.

# STOVE CASTERS UNIVERSAL BALL BEARING

#### Black Japanned Cast Iron Base

Can be used under both Square Base Stoves and Stoves with





# CASTER CUPS

WOOD



Plain Bottom, Oak Finish				
Nos	100	101	101 16	
Diameter, In App. Wt. Set,	2 1/4	2%	3 1/2	
Lbs	3/8	5/8	1	
Per Set of 4 &	0 25	20	40	

Mahogany Pinish

mane	gany rim	isn	
Nos	100-M	101-M	101 ½ -M
Diameter, Inches App. Wt. Per Set. Lbs		2 %	3 1/2
Per Set of Four	\$0.25	. 30	.40
Or	en Stock.		

#### GLASS

Nos 2544	2546
Diameter, In 2 1/4	2 %
Wt. Set, Lbs %	11/4
Per Set of 4 \$0.30	.30

Open Stock.



# DOMES OF SILENCE



Case Hardened Steel Disc, Highly Polished

Size, Inches	3/2	96	34	76
Weight Per Set, Lbs	3/4	3/8	1/2	5/8
Per Set of Four	\$0.10	.10	.10	.10

Furniture fitted with Domes of "Silence" will glide easily, silently and smoothly over floors and carpets. The Domes may be put in place in a few seconds with but a gentle tap of a hammer.

One Set in a Paper Carton, One-quarter Gross Sets of a Size in a Counter Display Carton.

# CHAIR GLIDES

B. & R.

Heavy Hardened Steel, Highly Polished Especially for Use on Delicate Chair Legs.

A	Nos	1 <sup>9</sup> 6	1673 1 1/3 . 20
No. 1673.	Nos. Size, Inches Weight Per Box, Lbs. Per Set of Four	1672 18 2	1671 12 1/2 2 1/2 . 20
No. 1015.	Twenty-five Sets in	a Box.	

Heavy Hardened Steel Outer Shell, Nickel Plated and Polished

Unbreakable Prongs and Center Pin Project from Untempered Inner

Per Set of 4 Twelve and One-half Sets in a Box.



# FELTOID CHAIR TIPS

With Screw

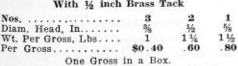
Made of a special, Semi-Yielding Composition. Has a soft Silken Tread that will not mar the finest polish.

Per Set of 4 No. 1-% in. Diameter, Weight Per Box ½ Lb.....\$0.25 Twelve Sets in a Box.

# TACK BUMPERS

RUBBER HEAD

With 1/2 inch Brass Tack







# SCREW BUMPERS

SLOTTED RUBBER HEAD

With No. 10 Wood Screw

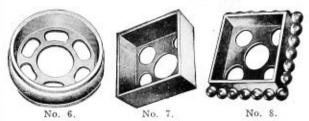
rer Dozen No. 132-% in. Diameter Head, Wt. Per Dozen About 1/4 Lb....\$0.75

One Gross in a Box.

# PLAIN RUBBER BUMPERS

To Be Nailed or Screwed Nos. Outs. Diam., In . . . Height, In. ..... Wt. Gross, Lbs.... Per Gross..... \$0.50 .60 1.20 No. 3. One Gross in a Box.

# FURNITURE RINGS

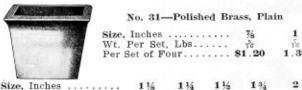


#### Polished Brass

Price Per Set of Four.

	* * * * * * * * * * * * * * * * * * * *		20 10 40 100		77.7			
Diameter, In								2
Av. Wt., Set, Lbs.								
No. 6-Plain	\$0.31	.36	.40	.45	.50	. 55		
No. 7-Plain	.50	.55	.60	.65	.70	.75	1.00	1.00
No. 8-Beaded	. 50	.55	.60	.65	.70	.75	1.00	1.00
	0	pen	Stoc	k.				

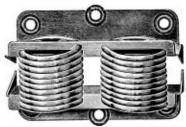
# CHAIR AND TABLE SOCKETS



1 1/8 1 % Weight Per Set, Lbs... 1/2 1 1/8 \$1.35 1.50 1.80 2.70 Per Set of Four..... 3.75 Open Stock.

# ROCKER SPRINGS

SENG ALL-STEEL



Small Double Spring No. 81/2-15 in, Stamped Steel Plate, 4 % in, Long, Open Stock.



#### Large Single Spring

Per Pair No. 6-4 in Stamped Steel Plate, 4 in. Long, 4 in. Wide, with One Steel Spring, 2 1/4 in. Diam-eter, Made of No. 6 

Open Stock.

# HOUSE NUMBERS



#### EMBOSSED

Polished Aluminum, Embossed

Per 100

No. 5—3 in. Numbers from 0 to 9

Including Character "½"...\$5.00

Twenty-five in a Box, with Pins.

# 3

#### EVERBRITE

"Everbrite" House Numbers are made of Porcelain-tile Blocks, with a Background of White Enamel Glaze.

No. 38—Size Block 3½x1¾ in., ¼ in. Thick, Height of Number 2¼ in., Numbers from 0 to 9..80.25

Open Stock.

#### EVERBRITE IN METAL FRAMES



#### NUMBERS ONLY

Black Numbers, White Porcelain Blocks

#### FRAMES ONLY

#### Aluminum, Black Japanned Finish

																E	ach
No.	32-2-	-For	2	Numbers.												80	.25
No.	32-3-	-For	3	Numbers.													25
No.	32-4-	-For	4	Numbers.		,			٠.		,		÷				.25



#### CAST NUMBERS

#### Cast Brass

Ten in a Box, with Screws.



# Cast Bronze

Size 3 in.. Fastened to Wood by Pins Projecting from the Back, Numbers from 0 to 9.

No.	B128-	-Polished Bronze	٠.
No.	R128	-Antique Copper, Polished 45	
No.	EA128	-Dull Brass, Natural Color45	
		Onen Stock	

# HOUSE NUMBERS

#### RADIUM



#### Radium Luminous Metal

Can be seen plainly in the dark.

Each

No. R—2½ in. Numbers, 0 to 9, Pin Holes for Fastening ......\$1.00

Open Stock.

# EMBOSSED LETTERS



#### Brass

Assortments consist of 162 Letters, Six of Each from A to & inclusive, in an Attractive Compartment Show Case Box, with 4 Letters Mounted in the Labeled Cover.

# LETTERS IN METAL FRAMES

EVERBRITE





#### LETTERS ONLY

#### Black Letters, White Porcelain Blocks

No. 31—Size Block 2½x1½ in., ¼ in. Thick, Height of Letter 2 in., Letter A to & Inclusive......\$0.12

#### FRAMES ONLY

#### Black Japanned

Length, Inches. 6 9 12 15 18 21 24 Each . . . . . . . 80.24 . . 26 . . 31 . . 36 . 41 . . 45 . . 50

# SCREEN NUMBERS

#### Wrought Brass, Polished



½ in. Heads, Numbers Impressed and Black Enameled.

No. 0-99—Numbers from 0 to 99.....\$2.00 Open Stock.

### PUSH AND PULL PLATES



### Wrought Bronze

4 1/4 x 1 3/8 in.

Each No. 847—Push Plates....\$0.40 No. 857—Pull Plates......40

Weight Per Box % Pound. Ten in a Box, with Screws.





Contract Con		W- 24 2 2
Cost	Margar	Polished

		2 1/4 x4 1	in.	1	Per Dozen
No.	9341 -Push Plate	8			\$12.00
No.	9341 1/2 -Pull Plates				12.00
	Weight Per	Dozen	2 1/2 Po	unds.	
	One Dozen i	n a Box	, with S	crews.	

### PUSH PLATES

## 0 0

		12	x3 1/2 in.	Per	Dozen
No.	3234-	-Antique	Copper.	Polished. \$	4.65
No.	3236-	-Dull Bra	ass. Natu	ral Color.	4.65
No.	3244	-Antique	Brass, S	Sanded	5.60
	337	aight Par	Dozen 7	Pounde	

Wrought Steel

### Wrought Bronze

	10 X 2 % 1n.	
No.	R23221/2 Antique Copper, Pol-	
	ished	8.35
No.	EA23221/2 - Dull Brass, Natural	
	Color	8.35
No.	A2322 1/2 Polished Brass	
	Weight Per Dozen 5 1/4 Pounds.	

	Weight Per Dozen 5 1/4 Pounds.	
	12x3 1/2 in.	
No.	3279-Antique Copper, Polished.	12.00
	3281-Dull Brass, Natural Color.	
No.	3287-Antique Brass, Sanded	12.50
	Weight Per Dozen 7 Pounds.	

	16x4 in.	
No.	0265—Antique Copper, Polished	16.50 $16.50$
	Weight Per Dozen 12 Pounds.	

7.527010	
Cast	Bronze

	14x3½ in. Each
No.	B2342—Polished Bronze\$3.35
No	EA2342-Dull Brass, Natural Color 3.35
7400	Process With I District Deliched 2 65
No.	E2342—Nickel Plated, Polished
	16x4 in
No.	B2342—Polished Bronze 3.75
Min	EA2342-Dull Brass, Natural Color 3.75
NO.	En2042 Dull Blotad Deliched 4 10
No.	E2342—Nickel Plated, Polished

One-half Dozen in a Box, with Screws.

### PUSH PLATES

# 0 0

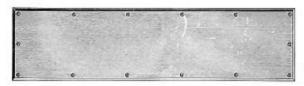
Wrought Bronze
12x3 in.
Each
No. B2325 1/2 — Polished Bronze \$1.20
No. R2325 1/2 - Antique Copper, Pol-
ished
No. EA232512 - Dull Brass, Natural
Color
No. SKA2325 1/2 — Sanded Brass, Oxi-
dized and Relieved 1.35
No. F2325 1/2 — Genuine Rustless Iron . 80
Weight Per Box 41/2 Pounds.
16x4 in.
No. R2325 1/2 Polished Bronze 1.95
No. R2325 1/2 - Antique Copper Pol-
ished
No. EA2325 1/2 — Dull Brass, Natural
Color
No. SKA2325 1/2 —Sanded Brass, Oxi-
dized and Relieved 2.10
No. F2325 1/2 — Genuine Rustless Iron. 1.30
Note-In Ordering, State Size Wanted.
Weight Per Box 7 % Pounds.

Six in a Box, with Screws.

### No. 2300—Plate Glass, Beveled

Size, Inches	12x3	15x3 1/2	16x4
Weight Per Dozen, Lbs	12 1/2	16 1/2	22
Per Dozen	\$8.65	10.65	12.00
One-sixth Dozen	in a Box.	with Screws.	

### KICK PLATES



### Wrought Bronze

No.	14	В.	&	S.	Gauge,	Edges	Beveled	on	Three	Sides

	Per 100 Square Inches
No.	B2314—Polished Bronze
No.	R2314—Antique Copper, Polished 1.80
No.	EA2314—Dull Brass, Natural Color 1.80
No.	A2314—Polished Brass
No.	SKA2314—Sanded Brass, Oxidized and Relieved. 2.00
No.	F2314—Genuine Rustless Iron 1.80
	No. 16 B. & S. Gauge, Edges Beyeled on Three Sides
No.	B2316—Polished Bronze
No.	
No.	EA2316—Dull Brass, Natural Color 1.60
No.	A2316—Polished Brass
No.	SKA2316-Sanded Brass, Oxidized and Relieved. 1.70
No.	F2316—Genuine Rustless Iron 1.60
	Weight Per Square Foot About 3 Pounds.

### THRESHOLDS

Open Stock.



Cast Brass or Bronze, Plain or Grooved Top In 4, 4½ and 5 in. Widths. Furnished to Order in Any Length. Prices on Application.

### DOOR KNOCKERS









Cast	Brass

No.	380-DB 8 1/2 x 2 1/2	in.,	Dull	Brass
				Brass 4.00
No.	377-DB-5 % x218	in.,	Dull	Brass 3.50
No.	384-DB-6 34 x 3 1/8	in.,	Dull	Brass 3.75

The Door Knockers shown above are hand made castings, heavy, well finished, and durably lacquered. They are not modernized in any way by the patternmaker, but are actual impressions from original knockers collected over a long period of time.

Furnished to order in any finish desired to match front door hardware.

One in a Box, with Screws.

### ELECTRIC PUSH BUTTONS

FOR USE WITH FRONT DOOR HANDLES



Cast Bronze 21/4 x 21/4 in.

Each No. EA75561-Dull Brass, Natural Color .....\$2.00

Weight Per Box 1/2 Pound. Three in a Box, with Screws.

Cast Bronze

Size 2 in.

Each No. KA78561 — Dull Brass, Oxidized

and Relieved ......\$4.00 Weight Per Box 1/2 Pound. Three in a Box, with Screws.



Cast Bronze

1 % x1 % in.

Each No. HPE85061-Imitation Half Polished Iron ......\$2.75 Weight Per Box 1/3 Pound. Three in a Box, with Screws.



3x1 1/2 in.

Each No. KA97461-Dull Brass, Oxidized and Relieved ......\$4.00

Weight Per Box 1/2 Pound.

Three in a Box, with Screws.



### ELECTRIC PUSH BUTTONS

FOR USE WITH FRONT DOOR HANDLES



Cast Bronze

4 14 x 1 14 in.

Each No. SHB94261-Statuary Bronze, Light,

Sanded .....\$4.75 Weight Per Dozen 34 Pound.

Three in a Box, with Screws,

Cast Bronze

3 1/2 x1 1/8 in.

Each No. KA77861-Dull Brass, Oxidized and Relieved .....\$4.00

Weight Per Box 1/2 Pound.

Three in a Box, with Screws.



With Binding Posts

For % in. Hole.

Each

No. 25465-Nickel Plated Rim, Light Pearl Center ......\$1.00 The springs at the side hold the push securely in position.

Weight Per Box % Pound. Twelve on a Display Card.



### FOR APARTMENT HOUSES

Wrought Bronze

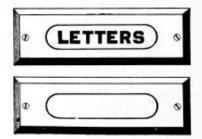
6 % x2 ¼ in., Name Panel Openings 176 in. Wide, Standard Centers, Loose Fibre Backs, German Silver Springs, 2 Pushes.

No. 25907-2-Dull Brass.....\$2.00

Weight Per Dozen 4 Pounds.

One-quarter Dozen in a Box, with Screws.

### LETTER DROP PLATES



Solid Brass

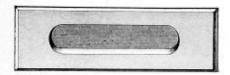
Size 2 1/4 x7 in., Opening 1/8 x4 1/8 in., with Back Plate. Per Dozen No. 100-AC-Antique Copper ...... ....\$12.00 No. 100-DB-Dull Brass ...... 12.00 Weight Per Dozen 4 Pounds. Size 2 1/2 x8 in., Opening 1 1/2 x6 1/4 in., with Back Plate. No. 200-AC-Antique Copper ..... 15.00 No. 200-DB-Dull Brass ...... 15.00 Weight Per Dozen 9% Pounds. One-half Dozen in a Box, with Screws,

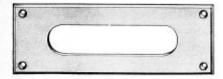
Each

Each

. . \$6 . 65

### LETTER DROP PLATES





### Cast Iron Size 2x7 in., Opening 1x4 1/2 in., with Back Plate.

Weight Per Box 5 1/2 Pounds, Size 4x10 1/2 in., Opening 2x7 in., with Back Plate. Each No. EA03424 1/2 - Dull Brass, Natural Color. . . . . . 2.95 Weight Per Box 11 Pounds. Cast Bronze Size 2x7 in., Opening 1x4 1/2 in., with Back Plate. Each No. No. No. No. SKA02326 34 - Sanded Brass, Antique and Re-lieved No. F02326 34 — Genuine Rustless Iron..... 2.45 Weight Per Box 6 Pounds. Size 3 1/8 x8 in., Opening 1 1/2 x6 in., with Back Plate. No. EA02906 1/2 - Dull Brass, Natural Color . . . . . . . \$4.65

### HOUSE LETTER BOXES

Weight Per Box 11 Pounds.

Six in a Box, with Screws.

Weight Per Box 10 Pounds. Size 4x10 1/2 in., Opening 2x7 in., with Back Plate.

No. EA02424 3/2 - Dull Brass, Natural Color . . . .



### STANDARD

New Fastening Device may be used either as a Lock or Latch. Two Flat Steel Keys.

Size 11x5 1/4 x2 1/4 in.

### Wrought Steel

No. 1-B —Black Enameled. \$15.00 No. 1-0C—Oxidized Copper. . 18.00

### Solid Brass

No. 1-SB—Dull Brass....\$30.00

Weight Per Dozen 221/2 Pounds.

Two Dozen in a Case,

### HOUSE LETTER BOXES



### CORBIN

### Wrought Steel

Size 11 ¼ in. High, 5 ¼ in. Wide, 2 ¼ in. Deep.

Spring Attachment for Holding Papers, Secure Lock with 2 Flat Steel Keys.

No. 2437—Japanned . . . . . \$12.00

Weight Per Dozen 16 Pounds.

One in a Box, with Screws.



### Heavy Wrought Steel

Spring Attachment for Holding Papers, Flat Keyed Lock, with 2 Flat Steel Keys.

Size 11 14 x 5 14 x 2 14 in.

Per Dozen
No. 2418—Antique Copper . \$26.50
No. 2416—Dull Brass . . . . . 26.50

Weight Per Dozen 25 Pounds.

One in a Box, with Screws.



### Heavy Sheet Metal

Spring Attachment for Holding Papers, Secure Lock and 2 Flat Steel Keys.

Size 10 1/2 x5 1/4 x3 in.

Lacquered ........... 36.00 Weight Per Dozen 26 Pounds.

One in a Box, with Screws.



N

### Heavy Sheet Metal

This box is constructed of heavy sheet metal, stamped to shape and firmly riveted, and is stronger and more durable than any cast box made.

Spring Attachment for Holding Papers, Secure Lock with 2 Flat Steel Keys.

Size 10 1/2 x 5 1/2 x 2 1/4 in.

			Per Dozen
Va	2-Steel	Dull Black Japanned	\$31.75
Va	4-Steel	Old Copper Finish	45.50
No.	10-Brass	Dipped and Lacquered	52.75

Weight Per Dozen 40 Pounds.

One in a Box, with Screws.

### RURAL MAIL BOXES



Heavy Gauge Steel, Aluminum Finish

Each

No. 1-Inside Measurements 18 1/2 in. Long, 6 1/4 in. Wide, 7½ in. High, with Slot in Door for De-positing Letters, 20 and 22 Gauge Galvanized Steel, Finished in Aluminum in Accordance with Specifications of U. S. Post Office Department. \$1.50

Weight Each 8 Pounds.

Six in a Crate.



Heavy Gauge Steel, Aluminum Finish

Each

No. 11/2-14 in. Long, 11 in. High, 4 in. Wide, Complete with a 5 Secure Lever Master Keyed Lock, and Double Signal......\$6.50

Weight Each 6 1/4 Pounds.

One in a Carton.



### APARTMENT HOUSE LETTER BOX FRONTS

Wrought Brass

Size 11 % x4 % in.

Each No. 1700-A -Polished Brass. . \$4.00 No. 1700-EA-Dull Brass .... 4.00

Complete with mouth-piece for speaking tube, electric push button, five secure lever lock, and plate with card for owners name or number. Glass panel in door permits the contents of the box to be seen.

One in a Carton.

### APARTMENT HOUSE LETTER BOXES

Approved by Post Master General for Buildings Housing More than Two Apartments.





Front View.

Side View.

### No. 1707-Matted Gold Finish

Made in Batteries of 3, 4, 5 or 6 Boxes.

Boxes in Battery	3	4	5	6
Width, Inches	17	22	27	32
Height, Inches	19 1/2	19 1/2	19 1/2	19 1/2
Depth, Inches	5 1/8	5 1/8	5 1/8	5 1/8
Each	\$30.00	40.00	50.00	60.00

### Specifications:

Fronts-Partitions and Face Plates, Solid Brass.

Master or Carrier's Lock-Furnished and Installed by Local Post Office Authorities,

Tenant's Lock-Secure Lever, Two Flat Steel Keys, All Different.

Card Holders-Outside, to Designate Number of Apartment and Name of Tenant; Inside, to Carry Names of Occupants of Apartment; Slot in Front for Calling Cards.

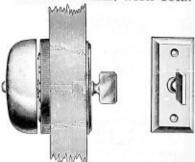
### Wall Opening Measurements

Boxes in Battery	3	4	5	6
Width, Inches	15 14	2014	25 14	30 14
Height, Inches	17 34	17 %	1734	17 %
Depth, Inches	4 1/8	4 1/8	4 3/8	4 1/6

These Boxes can be installed in connection with vestibule telephones, or furnished with push button and mouthpiece for speaking tube.

### DOOR BELLS

ROTARY STRIKE, WITH TURN



Wrought Steel

3 1/2 in. Bell, 3 1/4 x1 1/2 in. Bell Turn.

**	*******	Per Dozen
No.	R60211-	-Antique Copper, Polished
No.	EA60211-	-Dull Brass, Natural Color 15.60
		Weight Per Set 1 Pound

One Set in a Box, with Screws and Connecting Rod.

### IRON BOX BELLS



### Designed for Long and Hard Service

Specially formed hard fibre in addition to rubber tubing is used where necessary to prevent circuit wires coming in contact with the bell frame.

The armature, striker rod and ball are all made from one piece of metal, preventing trouble caused by a loose ball or rod.

Japanned Steel Case, Nickel Plated Steel Bell

### TRANSFORMERS

BELL RINGING



### Porcelain Housed

Moisture and Rust Proof, 12 in, Primary Leads for Easy Installation.

### ALARM DOOR BELLS

AUTOMATIC

Nickel Plated

Eac

No. 201—Applicable to Any Door or Wide Sash......\$0.75

Closing the door sets the operating mechanism so that when door is opened the alarm is sounded. The bell can be made silent by the stop mechanism.

Weight Each 1/2 Pound.

Cut Quarter Size.

One in a Box, with Screws.

### YANKEE



Polished Bell, Japanned Mountings

NICHOLS PATENT



Bronzed Steel

One in a Box.



Black Shells

Constructed of "Indestructible" Steel and Furnished Complete with Attachments.

Nos	557	558	559	560	561	562
Shell, Inches	8	9	10	11	12	14
Wt. Dozen, Lbs.	75	84	9.0	96	1211/2	1571/2
Per Dozen	\$23.40	24.60	26.40	30.00	31.20	37.80
	(	men St	ock.			

### TRIP GONG BELLS



No. 173—Polished Bell Metal

1101 110	T CAROLIC	a second are	- cere	
Size Bell, Inches	3	$19 \\ 12.50$	5	6
Weight Dozen, Lbs	14		26	33
Per Dozen	\$10.00		16.50	24.00
Size Bell, Inches	7	8	$\begin{array}{c} {\bf 9} \\ {\bf 120} \\ {\bf 70.00} \end{array}$	10
Weight Dozen, Lbs	63	75		132
Per Dozen	<b>\$34</b> .00	46.00		84.00
Size Bell, Inches Weight Dozen, Lbs Per Dozen All over 8	12 192 \$150.00 in. have Open St	wood ha	16 420 260.00 mmers.	18 492 310.00

### HAND BELLS

Highly Polished Brass, Rubberoid Handle



		Hand	ie	
No.	Diam. Mouth, In.	Weight Dozen Lbs.	Dozen in Package	Per Dozen
0	2	1 1/2	1/2	\$ 2.00
1	2 %	. 214	1/2	2.62
2	2 5%	3 1/2	3/2	3.50
4	3 3%	7 1/2	1/2	6.50
6	4	1134	1/3	11.25
8	5	1734	3/10	18.50
10	5 &	25	1/12	30.00
12	6 1/6	3.7	3/12	36.00
1.4	7.34	4.2	1/12	48.00
15	7.84	5.2	140	54.00

### CALL BELLS

Wrought Steel, Nickel Plated

No. 72—3% in. Diameter, Wrought Steel
Base and Bell, Finely
Polished and Heavily
Nickel Plated...\$2.50
Weight Per Dozen 34
Pounds.

One-half Dozen in a Box.



### SHELF BRACKETS

	Branch			
	Wrought S			
	Size, Inches	3x4	4x5 5 2.50	5x6 6 3.25
Sept.	Wt. Dozen Pairs, Lbs Per Dozen Pairs \$3	5x7	6x8 8 ½ 4 . 40	7x9 10 5.40
	Size, Inches		8x10 12 \$6.00	10x12 21 ½ 8.75
U	Size, Inches		28	16x18 44 30.00

3x4 and 4x5 in., One Dozen Pairs; 5x6 to 7x9 in., One-half Dozen Pairs; 8x10 to 12x14 in., One-quarter Dozen Pairs; 16x18 in., One Pair in a Box.

No. 492-C	-Brass	Plated		
Size, Inches		4x5 7.50	5x7	6x8 12.00
Size, Inches	7x9	8x10	10x12	12x14
Per Dozen Pairs	\$13.00 Nickel		17.50	26.25

Size, Inches	4x5	5x7	6x8
Per Dozen Pairs	\$10.50	12.00	15.00
Size, Inches		10x12	12x14
Per Dozen Pairs	\$16.50	21.00	30.00
3x4 and 4x5 in., One Dozen Pa			
Dozen Pairs; 8x10 to 12x1			ozen
Pairs in a Box,	with Scre	ws.	

### Wrought Steel, Extra Heavy No. 790-I-Iananned

Size, Inches	16x18
Weight Per Dozen Pairs, Lbs	81
Per Dozen Pairs	\$55.00
One Pair in a Package.	

### FOLDING SHELF BRACKETS



### Wrought Steel No. 194-J-Japanned

Size, Inches	8x8	12x12	16x16
Weight Per Dozen, Lbs	15	34	55
Per Dozen Pairs	\$16.00	24.00	40.00

The best bracket made for folding shelves. Locks automatically when open and can be let down out of the way quickly and easily.

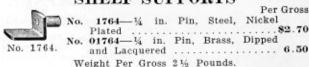
One Pair in a Box.



### SHELF SUPPORTS

Cast Iron, Coppered Per Gross Weight Per Gross 9 1/2 Pounds. One-half Gross in a Box.

### SHELF SUPPORTS



One Gross in a Box.

				Per Gross	
No.	C0717-1/4	in. Pin,	Cast Iron,	Cop-	ų
	pered			\$2.10	
No			last Brass		

Weight Per Gross 4 1/8 Pounds.

One-half Gross in a Box.

No. C715-5 in. Pin, Cast Iron, Coppered, Weight Per Gross 4% Lbs. \$2.10 No. C719—% in. Pin, Cast Iron, Coppered. Weight Per Gross 5 1/4 Lbs. . 4.45 One-half Gross in a Box.

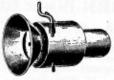
Per Gross No. C0716-4 in. Pin, Cast Iron, Coppered ...... No. 71614-14 in. Pin, Cast Brass.... 9.35

No. C01716.

Per Gross

Weight Per Gross 4 Pounds. One-half Gross in a Box.

### SPEAKING TUBE WHISTLES



Per Dozen No. 158—Yellow Enameled Body, for 1 in. Tubing, with Indicator and Porcelain Mouthpiece......\$5.00 No. 1581/2-Brass, Nickel Plated, with Indicator . . . 8.00 Open Stock.

### SPEAKING TUBES



Bright Tin

Per 100 Feet No. 0-1 in., Lock Seamed, in 5 ft. Lengths......\$5.00 Open Stock.

### SPEAKING TUBE ELBOWS AND TEES ELBOWS



Bright Tin

No. 2-Square, for 1 in. Tubing . . . . \$0.12 Open Stock.

TEES

Bright Tin

Each No. 7-For 1 in. Tubing. 80.14 Open Stock.



### HAND RAIL BRACKETS



### Cast Iron

2 1/8 in. Base, 2 in. from Base to Center of Rail. Per Dozen

No. Y102—Amber Bronzed...\$2.65

Weight Per Dozen 5 ½ Pounds.

One Dozen in a Box, with Screws.

No. 102.



### Cast Iron

2 1/8 in. Base, 3 in. from Base to Center of Rail.

No. Y102½ — A m b e r Bronzed . . . . . . . \$3.35

Weight Per Dozen 6 1/2 Pounds. One Dozen in a Box, with Screws.

### Cast Iron



3 % x1 % in. Base, 2 % in. from Base to Center of Rail. Per Dozen

Natural Color . . . . 3 45 Weight Per Dozen 5 % Pounds.

Weight Per Dozen 5% Pound 3%x1% in. Base, 4 in. from Base to Center of Rail

 No.
 R101½—Antique Copper
 \$4.20

 No.
 EA101½—Dull Brass, Natural Color
 4.20

 Weight Per Dozen 9¾ Pounds.
 4.20

### Cast Bronze



### Cast Iron

3 in. Base, 31/2 in. from Base to Center of Rail, with 1/2 x4 in. Lag Screw and Expansion Bolt Shield.

Per Dozen

No. EA104—Dull Brass, Natural Color . . . . . . . . . . . \$10.00

Weight Per Dozen 15½ Pounds. One Dozen in a Box, with Screws.



No. 271—Wrought Steel, Plain % in. Rod.

### HAND RAIL BRACKETS



### No. 272-Wrought Steel, Plain

 Length, Inches
 5
 6
 7

 Per Dozen
 \$1.50
 1.60
 1.70

 One Dozen in a Box.

### HAND RAIL SCREWS



No. 51—Wrought Steel, with One Nut Diameter fig in.



### No. 52-Wrought Steel, with Two Nuts

Diameter in in.

 Length, Inches
 4
 4½
 5

 Weight Per Gross, Lbs.
 19
 22
 26

 Per Gross
 \$10.25
 11.25
 12.50

 One-quarter Gross in a Box, with Two Washers for Each Screw.

### WINDOW WASHER BELTS

NATIONAL-ROYAL HOLDFAST



No. 1-A—National-Royal Holdfast Belts......\$24.00

These belts are made of the best oak tanned leather and Manila rope. All terminals and metal parts are genuine bronze.

Furnished with terminals to fit any type of device, for either a two bolt or four bolt system.

We are prepared to quote on bolts and anchors for installation in any kind of wall, window frame or mullion, or for equipping old buildings.

### DOOR BOLTS

IMPROVED "DRAWTITE"



The "Drawtite" Bolt is designed for easy application to ends of single, double or parallel doors. It draws the doors firmly together or against the building making a weatherproof joint. May be locked with an ordinary padlock.

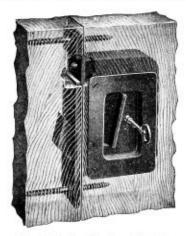
Bolt cannot be removed when locked as it is securely held by a covered screw that is inaccessible.

### Malleable Iron, Dead Black Finish

One in a Carton, with Screws.

### SLIDING DOOR LOCKS

FOR SINGLE AND DOUBLE DOORS



Dead Black, Rustless Finish

Lock, Latch and Flush Door Pull Combined, Operated from Either Side of Door. Latch is Released and Door Pulled Open by Same Operation. For Use in Garages, Stables, Warehouses, Factories, etc.

> Weight Per Dozen 45 Pounds. One in a Box, with Screws.

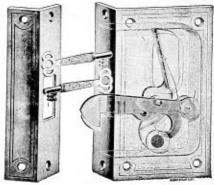
IF IT'S AUTOMOBILE ACCESSORIES

### WE HAVE IT

LARGE LINE SHOWN IN OUR 500 PAGE AUTOMOBILE ACCESSORY CATALOGUE

### BARN DOOR LOCKS

FOR SLIDING DOORS



Japanned

Per Dozen

No. 80—7½x4¼ in. Face, 4½x1½ in. Catch Plate, 4½x2½ in. Escutcheon, Two Steel Keys....\$35.00 This Lock is reversible. It may be unlocked from the inside by pulling back the lever,

It is impossible to raise the bolt from the outside by inserting any appliance under it between the door and jamb.

Weight Per Dozen 50 Pounds. One in a Box, with Screws.

### GARAGE DOOR LOCKS FOR SLIDING DOORS



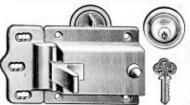
Dead Black Finish

Each

No. 210—5 %x4 in. Cast Iron Case, Malleable Iron Hinged Self-Latching Latch Bolt, Protected Strike, 1 Cast Bronze Ball Bearing Pin Tumbler Cylinder, Changes Unlimited, 3 Nickel Silver Keys, Operated by Key from Outside and Lever Inside, Latch Bolt May be Held Retracted by Stop, for Sliding Doors 1½ to 3 in. Thick.....\$4.40

Weight Each 2 % Pounds. One in a Box, with Screws.

### FOR SWINGING DOORS



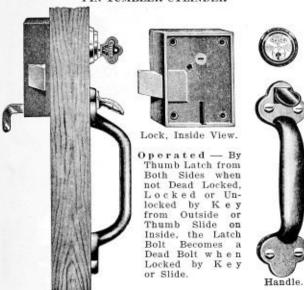
Dead Black Finish

Each

Weight Each 2 % Pounds. One in a Box, with Screws.

### RIM GARAGE LOCK SETS

PIN TUMBLER CYLINDER



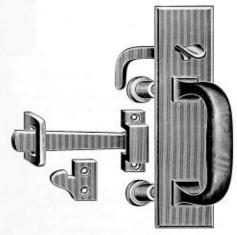
### Cast Iron

Sectional View.

For Right or Left Hand Doors, Opening In or Out. Per Set No. 1050J-Japanned Finish ......\$6.00 Lock-4 1/2 x 3 % in. Japanned Iron Case, 2 1/2 in. Backset. Cast Brass Easy Spring Latch Bolt, Reversible, 3 Nickel Silver Keys. Handle—One No. 03951, Size 8 1/2 x 2 1/4 in.

> Weight Per Set 416 Pounds. One Set in a Box, with Screws.

### MILL DOOR THUMB LATCHES



Cast Iron, Japanned

Per Dozen

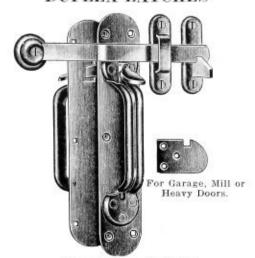
Wt. Dozen, Lbs.

No. 01136-10x2 % in. Plate, for Doors Not Over ....\$16.80 2 % in. Thick . . . .

Weight Per Dozen 54 Pounds.

One-quarter Dozen in a Box, with Screws.

### DUPLEX LATCHES



Wrought Steel, Japanned

Per Dozen

Weight Per Dozen 75 Pounds.

One in a Box, with Screws and Extra Flush Catch.

### GARAGE OR BARN DOOR LATCHES



Wrought Steel, Japanned

Per Dozen

No. 1252J-10 1/2 in. Handle, 12 in. Bar......\$18.75 Weight Per Dozen 32 Pounds. One in a Box, with Screws.

### SWINGING DOOR LATCHES

R-W LION



Malleable Iron, Japanned

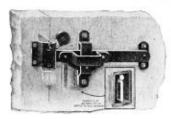
Operated from Either Side, Reversible for Right or Left Hand Doors. 225 - 2225 - 3225 - 4225 - 1Nos. . 1 1/4 x12 1 1/2 x 1 4 1 1/2 x 14 Latch Bar, In. . 1x10 1 14x12 For Doors, In. . . 1 34 to 2 56 1 34 to 2 56 1 % to 2 % 1 % to 3 70 82 42

10.00 12.00 14.40 \$8.00 Per Dozen .... Nos. 225-1 and 225-2, One Dozen; Others, One in a Box.

35

### SLIDING DOOR LATCHES

R-W MONARCH



Wrought Steel, Japanned

Per Dozen No. 152 - 1 1/2 x14 in. Latch Bar, 3 % x2 1/8 in. Flush Cup for Use on Opposite Side of Door, Reversible for Right or Left Hand Doors 1% to 2% in. Thick, Operated from Either Side.... \$11.70

Weight Per Dozen 66 Pounds. One in a Box.

### COTTAGE LATCHES



Per Dozen No. 128-Cast Iron, Enameled . . . .....\$2.80 Weight Per Dozen 8 1/4 Pounds. One-half Dozen in a Box.

### THUMB LATCHES



Cast Iron, Japanned

Wrought Steel Bar.

Per Dozen No. 25-9 1/2 in. Handle . . . . . . . . . . . \$4 . 80

Weight Per Dozen 211/2 Pounds.

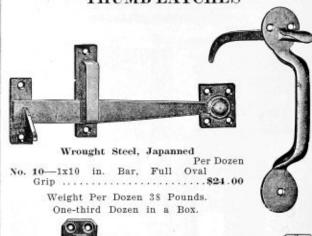
One-quarter Dozen in a Box, with Screws.

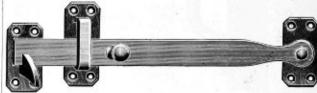


Per Dozen

5.75

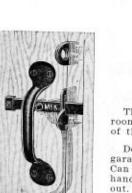






### Wrought Steel, Japanned

Per Dozen No. 20-14x121/2 in. Bar, 111/2x2 in. Plate, Full Oval Grip .... \$51.00 Weight Per Dozen 48 Pounds. One-sixth Dozen in a Box.



### DUOGRIP

The Duogrip Latch affords roomy handle or grip on each side of the door.

Designed for use on doors of garages, barns, warehouses, etc. Can be used on either right or left hand doors, swinging either in or

A pair of wrought steel padlock eyes is furnished with each latch.

### Wrought Steel, Japanned

No. 1945—Thumb Piece Handle 7% in., Larger Handle 8% in., Latch Bar 6% in., 2 Screw Holes at Top and Bottom of Each Handle . . . . \$12.50 Per Dozen Weight Per Dozen 21 Pounds.

One Latch in a Box, with Screws and Directions for Attaching.

### DOOR PULLS



Wrought Steel, Japanned

Per Dozen
No. 1265J — 10 ½ in.
Long Over All, 1 ¼
in. Wide, 2 ½ in.
Wide at Ends... \$9.40

For garages, stables, freight cars, etc.

Weight Per Dozen 8 Pounds.

One-half Dozen in a Box, with Screws.

	Wrought Steel, Ja	apanned
	No	5 1 ¼ 1 ¾ 1 %
	No. Length, In Width Plate, In Wt. Dozen, Lbs Per Dozen	5 1 ½ 1%
	No. Length, In. Width Plate, In. Wt. Dozen, Lbs. Per Dozen	6 1 34 2 %
0 % 0	No	7

No. 482J-4, One-half Dozen, Others,

One Dozen in a Box, with Screws.

	Wrought Steel, J	apanned
	No	5 1/8 2 1
	Length, In Screw Holes Wt. Dozen, Lbs. Per Dozen	6 1/2
	No. Length, In. Screw Holes Wt. Dozen, Lbs. Per Dozen	
1	No	1257J-4

No. 1257J-4, One-half Dozen, Others, One Dozen in a Box, with Screws.

Length, In....

Screw Holes . . .

Wt. Dozen, Lbs.

Per Dozen....

\$7.15

### DOOR PULLS





Cast Iron, Japanned
Per Dozen
No. 02207—6 in., Weight Per
Dozen 6½ Lbs.......\$1.50

Cast Bronze, Polished

No. 02209—6 in., Weight Per Dozen 7½ Lbs..................... 20.00 One-half Dozen in a Box, with Screws.



Cast Bronze

### DOOR PULLS

Cast Bronze

Weight Per Dozen 2 1/4 Pounds.

One Dozen in a Box, with Screws.

### Cast Bronze

No. 1697, Three Dozen; No. 1698, One Dozen in a Box, with Screws.

### Wrought Steel

Length 5 in,
No. Per Dozen
580—Antique Copper.\$0.65
582—Dull Brass, Natural Color . . . . . . 65

### Wrought Brass

Length 5 in.

### Steel Wire

Length 4 ½ in. Per Gross

OUR BUILDERS HARDWARE DEPARTMENT is in a position to furnish estimates on your hardware requirements according to plans and specifications.

### DOOR PULLS



### Cast Bronze

Cast Di Olize
7 % x2 in.
No. R02210—Antique Copper, Polished
No. EA02210—Dull Brass, Natural, Color
No. A02210—Polished Brass 1.80 Weight Per Dozen 14½ Pounds.
One-quarter Dozen in a Box, with Screws.
Cast Bronze
With Machine Screws and Nuts to Fasten to Push Plate or Through Door.
7 % x2 in., 5 ½ in. Center to Center. Each
No. R02210¼—Antique Copper, Pol- ished
No. EA02210 1/4 - Dull Brass, Natural

	Weight Per Dozen 16 % Pounds.
	10x2 in., 7 % in. Center to Center.
No.	R0221014-Antique Copper, Polished 4.00
No.	EA0221012-Dull Brass, Natural Color 4.00
No.	A02210 1/2 — Polished Brass
	Weight Per Dozen 20 % Pounds.

One-quarter Dozen in a Box.

No. A0221014 -- Polished Brass .

Color



### Wrought Bronze

	10x2 %	in.	
			Each
No.	R4446—Antique	Copper,	Pol-
	ished		\$2.35
No.	EA4446-Dull Bras	s. Natural	Col-
	or		2.35
No.	A4446—Polished B	rass	2.35
	Weight Each	1 Pound.	

### Cast Bronze.

	14x3½ in.
	Each
No.	A4460-Polished Brass \$4.90
No.	EA4460-Dull Brass, Natural Color 4.90
No.	E4460—Nickel Plated, Polished. 5.35
	Weight Each 2 Pounds.

### 16x4 in.

No.	A4462—Polished	Brass		 		,	 7		10
No.	EA4462-Dull Bras	s, Natural	Color	 			 7	. :	10
No.	E4462—Nickel Pla	ated, Polis	shed	 			 7		75

Weight Each 2 1/2 Pounds.

Three in a Box, with Screws.

### SEND US YOUR

### SPECIFICATIONS

FOR ESTIMATES ON YOUR BUILDERS'
HARDWARE

### FLUSH DOOR PULLS



Cast Iron 3 % x2 ½ in.

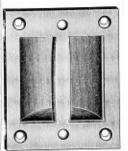
Cast Bronze

3 % x2 ½ in.

No. A01100—Polished Brass..... 21.35

Weight Per Dozen 5 Pounds.

One Dozen in a Box, with Screws.



### Cast Iron

5x4 in.

No. 2100—Japanned . . . . . \$10.55 Weight Per Dozen 16 1/4 Pounds.

### Cast Bronze

No. A02100—Polished Brass.\$66.65

Weight Per Dozen 19 % Pounds.

One-half Dozen in a Box, with Screws.

### FRICTION TOILET HINGES



### Wrought Steel, Coppered

No. 1760—1¼x1¾ in., Weight Per Dozen Pairs 1¾ Lbs. \$1.50

No. 1761—2x2⅓ in., Weight Per Dozen Pairs 3½ Lbs. 2.00

One Dozen Pairs in a Box.

### MIRROR PLATES



 Wrought Brass, Polished

 Nos.
 877
 878
 881

 Size, Inches
 1½
 1½
 1½
 1½

 Weight Gross, Lbs
 4½
 6
 8½
 8½

 Per Dozen
 80.45
 55
 80

No. 881 has Five Screw Holes.

One Gross in a Box, with Screws.

### PORCH POST IRONS

ARCH PATTERN



No. 1—2x5½ in... Per Dozen

Weight Per Dozen 9 Pounds.

Open Stock.

### ELEVATOR DOOR HANGERS

SELF-LOCKING LOOSE AXLE



Smooth Cast Iron, Japanned, for Wire Doors

Turned Wheels, Turned Steel Pin, Smooth Working, Noiseless, Strong and Durable.

Per Dozen Pairs

No. 330—3 in. Diameter Wheel, for Use with  $2\frac{1}{4}x\frac{1}{16}$ in. Rail, Weight Per Dozen Pairs 36 Lbs.....\$48.00

Open Stock.

### ANTI-FRICTION



### Smooth Cast Iron, Japanned, for Wire Doors

Turned Wheels, Turned Steel Pin, Smooth Working, Noiseless, Strong and Durable.

No. 332—3 in. Diameter Wheel, for Use with  $2x \frac{\delta}{16}$  in. Rail, Weight Per Dozen Pairs 32 Lbs...... \$36.00



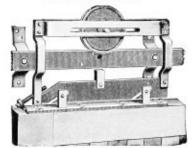
Smooth Cast Iron, Japanned, for Wire Doors

Turned Wheels, Turned Steel Pin, Smooth Working, Noiseless, Strong and Durable.

No. 333—214 in. Diameter Wheel, for Use with 114 x
14 in. Rail, Weight Per Dozen Pairs 18 Lbs... \$36.00
Open Stock.

### PARLOR DOOR HANGERS

LANE STANDARD



Heavy All Steel Frame, Silent Wheel To Run 4 Feet.

### For Double Doors

### For Single Doors

The Lane "Standard" hanger is built very heavy and strong and without any cast metal anywhere in its construction. A very extensively used type of parlor door

One Set in a Box.

### PROUTY CUSHION TRACK



All Steel Hardened Axle, Hard Maple Rail

### For Double Doors

Per Set

### For Single Doors

The special locking adjustment on the Hanger for raising or lowering the door is absolutely positive, for it is designed with a horizontal adjustment screw, which does not carry the weight of the door, but is used for adjustment only. It prevents the door from sagging and keeps it always in place.

The Hanger is fitted with special noiseless bearings, the tread being turned true to fit track. The axle is hardened and sound-deadening felt compression washers carefully protected by steel stationary washers prevent the wheel from side-play or rattle.

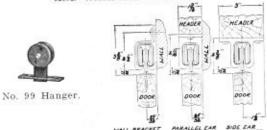
The track is especially constructed for No. 5 Hanger only. The hard maple rail is thoroughly kiln dried and mounted in a felt cushion supported by metal case.

The felt roll floor guides align and guide the door perfectly without binding.

One Set in a Box, with Screws.

### COBURN TROLLEY DOOR HANGERS

FOR PORCH SASH AND SCREENS, CHINA CLOSETS AND WARDROBE DOORS



Machined Iron or Fibre Wheels, Roller Bearings For Loads up to 20 Pounds.

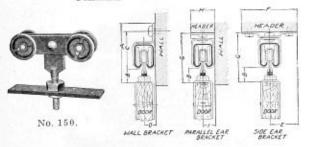
No.	99 — Iron Wheels
No.	99-F—Fibre Wheels
1110	For use with No. 0 Track Only.
	Weight Each ¼ Pound.
	Packed as Ordered, with Screws.



### Machined Iron or Fibre Wheels, Roller Bearings, Vertical Adjustment

	For Loads up to 40 Pounds.
No.	98 —Iron Wheels\$0.80 98-F—Fibre Wheels 1.00
	For use with No. 0 Track Only. Weight Each % Pound. acked as Ordered, with Screws.

### FOR USE WHERE DOORS SLIDE INTO POCKET OR PARALLEL TO EACH OTHER





### Machined Iron Wheels, Roller Bearing, Lock Nut Vertical Adjustment Only

Nos	150A	150B	150C
For Track, Nos		2	4
For Doors, Lbs	300	500	900
Min. Thick, of Doors, In.	1 1/2	1 1/2	2
Weight Per Pair, Lbs	5	7	11
Per Pair	\$3.50	4.25	6.75

### HEADROOM TABLE FOR No. 150 HANGER

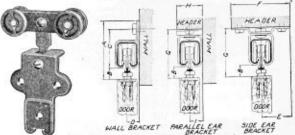
Sec. 1		A I		В		n
No.	Min.	Max.	Min.	Max.	C.	Ъ
150A	5 14	7 1/8	1	2 %	3.1/2	170
150B	6 1/4	7.7%	3/4	2 %	4 34	118
150C	7 %	9	7/8	2 %	5 1/2	110

5.0000	1200	-	l G	-	***	- 1
No.	E	F	Min.	Max.	Н	1
150A	2 %	5 1/6	4 1/4	6 1/6	2 14	1 1/0
150B 150C	2 % 3 %	5 1/4 6 3/8	5 1/s	6 18 7 38	3 14	115

One Pair in a Box, with Screws.

### COBURN TROLLEY DOOR HANGERS

FOR USE WHERE DOORS SLIDE TO SIDE ON SINGLE RUN OF TRACK



Machined Iron Wheels, Roller Bearing

Steel Pendant, Cast Iron	Petticoat,	Lateral	Adjustment
Only. Nos.	120A	120B	120C
For Track, Nos	400	600	1000
For Doors, Lbs	1 14 to 1 34		2 14 to 3 1/2
Weight Per Pair, Lbs	7	10 16	20 40
Weight Per Set, Lbs	12 ½ \$3.25	4.00	6.50

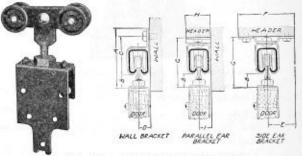
Note—A Set of Door Hangers contains Two Hangers, One Pair of End Wall Brackets and One Open Wall Bracket.

### HEAD ROOM TABLE FOR No. 120 HANGER

No.	A	В	C	D	E	F	G	Н	I
120A 120B 120C	5 1/4 6 1/2 7 1/2	1 1/8 1 1/8	3 ½ 4 ¾ 5 ½	1 1/4 1 1/4 1 1/4	2 % 2 % 3 %	5 14 5 14 6 3%	4 1/4 5 1/6 6 3/8	2 1/4 2 1/4 3 1/4	1 位 1 位 1 位

One Pair or One Set in a Box, with Screws and Bolts.

### FOR SINGLE OR SLIDING DOORS



Machined Iron Wheels, Roller Bearing

Steel Pendant and Petticoat, Lateral and Vertical Adjustment. 137C 137A 127B Nos. For Track, Nos..... 9 For Doors, Lbs..... 400 600 1000 1% to 1% 1% to 2% 2 1/4 to 3 1/2 Thickness of Door, In. . . . 9 21 Weight Per Pair, Lbs..... 6.75 \$3.50 4.25 Per Pair .....

-	A		В			-
No.	Min.	Max.	Min.	Max.	C	D
137A	5 %	7 %	1 1 16	3 1/8	3 1/2	1 1/4
137B	6 1/2	8 1/8	1	2 %	4 %	1 10
137 C	7 %	9 3%	1.14	3	5 1/2	1 11

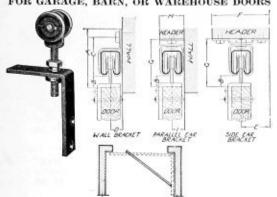
HEAD ROOM TABLE FOR No. 137 HANGER

44.0		77	G		77	
No.	E	F	Min.	Max.	Н	1
137A	2 %	5.34	4 %	6 3/8	21/4	1 1/2
137B	2 %	5 1/4	5 %	7 36	2 1/4	1 16
137 C	3 3	6 %	6 1/2	8 1/4	3 1/4	1 11

One Pair in a Box, with Bolts.

### COBURN TROLLEY DOOR HANGERS

FOR GARAGE, BARN, OR WAREHOUSE DOORS



Machined Iron Wheels, Roller Bearings Ball Bearing Swivel, Vertical Adjustment.

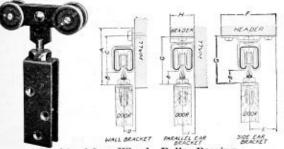
man a contract to the contract		,	
Nos	395A	395B	395C
For Track, Nos	1	2	4
For Doors, Lbs	300	500	900
Min. Thickn's of Doors, In.	1 1/2	1 %	2
Weight Per Pair, Lbs	4	6	12
Per Pair	\$3.80	5.00	7.60

### HEAD ROOM TABLE FOR No. 395 HANGER

		A	В			-
No.	Min.	Max.	Min.	Max.	C	D
395A	5 %	7 1/4	1 16	3	3 1/2	175
395B	6 %	8 1/2	1 3	2 18	4 3/4	178
395 C	7 34	10 %	1 %	4 %	5 1/2	111

	-	D	(	3	***	
No.	E	F.	Min.	Max.	н	1
395A	2 %	5 1/4	4 %	6 1/4	2 1/4	115
395B	2 %	5 14	5 %	7 1/2	2 1/4	116
395 C	3 16	6 %	6 %	9 7	3 1/4	111

Shipped as Ordered, with Screws.



Machined Iron Wheels, Roller Bearing

Steel Pendant and Petticoat, Lateral and Vertical Ad-

justment.	160A	160B	160C
For Track, Nos		2	4
For Doors, Lbs	400	600	1000
Thickness of Doors, In	1% to 1%	1 % to 2 %	214 to 31/2
Weight Per Pair, Lbs	7	9	15
Per Pair	\$4.50	5.25	7.75

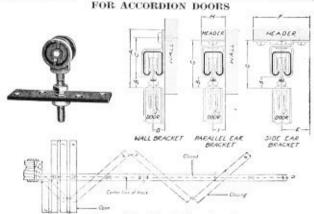
### HEAD ROOM TABLE FOR No. 160 HANGER

	1	A.	В			n
No.	Min.	Max.	Min.	Max.	С	ь
160A	5 %	7 16	1 1/8	3 1/2	3 1/2	116
160B	6 76	8 18	3/8	2 5%	4 %	115
160 C	7 70	9 70	1 18	3 1/2	5 1/2	116

No.				3		
	E	F	Min.	Max.	н	1
160A 160B 160C	2 % 2 % 3 %	5 1/4 5 1/4 6 3/8	4 % 5 via 6 via	6 na 7 nh 8 n€	2 1/4 2 1/4 3 1/4	1년 1년 1년

One Pair in a Box, with Bolts.

### COBURN TROLLEY DOOR HANGERS



Cast Iron Wheels, Roller Bearings

Ball Bearing Swiv		Adjustment.	
Nos	375A	375B	375C
For Track, Nos		2	4
For Doors, Lbs	200	400	600
Min. Thickn's of Doors, In.	1 1/2	1 1/2	2
Weight Per Pair, Lbs	2 1/2	3 1/2	5 1/2
Per Pair	\$2.60	3.25	4.55

A hanger is required for every other door starting with the full door next to the half door. Each door with hanger should have flush butt at bottom.

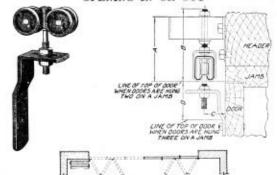
One run of track full width of opening is required.

### HEAD ROOM TABLE FOR No. 375 HANGER

		A	I	3		-	
No. Min. Max.		Min.	Max.	C	D		
375A 375B 375C	5 1/8 6 1/5 7 1/2	6 % 8 % 10 %	% 18 1 ⅓	2 % 2 % 3 <del>1</del> 2	3 ½ 4 ¾ 5 ½	1 10 1 10 1 10	
[	77	-	(	3	**		
No.	E	F	Min.	Max.	Н	1	
375A	2 %	5 1/4	4 1/8	6	2 1/4	118	
375B	2 %	5 1/4	5 1/2	7 3%	2 1/4	110	
375 C	3 75	6 %	6 3/8	9 1/8	3 1/4	1 11	

One Pair in a Box, with Screws.

### FOR DOORS WHICH SLIDE AND FOLD TO THE SIDE OPENING IN OR OUT



Cast Iron Wheels, Ball Bearing Lateral and Vertical Adjustments. Adjustable Wall

Brackets are necessary with this Hanger. 444C 444A Nos. For Track, Nos..... 125 200 400 For Doors, Lbs. . . . 1 % to 2 1/2 1% to 1% 214 to 31/2 Thickness of Door, In . . . . 2.34 Weight Each, Lbs..... 5.50 \$2.95 3.60 Each .....

### HEAD ROOM TABLE FOR No. 444 HANGER

	A		331	1 (	1	I	)
No.	Min.	Max.	В	Min.	Max.	Min.	Max.
444A	5 70	6 1/6	6.5%	1 16	2 18	3 %	4 1/2
444B	6 34	7 At	7 %	1 %	2 15	3 %	4 1/2
444C	7 1/4	718	8 3%	1 1/8	3 1/8	4 1/8	4 7/8

Packed Complete with Screws and Bolts for Attaching.

### COBURN TROLLEY TRACK

			١
1	<b>TRA</b>	CK	ı
.%	Nº	0	
ΞĪ	1.		
Ų,	ľ		J

Wrought	Steel,	Dead	Black	Finish

		1
Nos		4.57
Width, Inches	1	1 %
Depth, Inches	1 23	2
Weight Per Foot, Lbs.	5/8	1 1/2
Per Foot	\$0.20	, 26
Nos	2	4
Width, Inches	1 %	2 %
	3 14	3 1%
Depth, Inches		3 34
Weight Per Foot, Lbs.	2	
Per Foot	\$0.40	. 65

No. 9 furnished in lengths of 2 and 3 ft.; Nos. 1 and 2 in lengths of 10 ft.; No. 4 in lengths of 8 ft. Open Stock.

### TROLLEY TRACK BRACKETS SINGLE WALL BRACKETS



### For No. 0 Track

Nos	B01	B01R	B01L
Style		Right 20	Left 20
Each Weight E			100

	For No.	1 Track		
Nos.	 	B11	B11R	BiiL
			Right	Left
			.30	.30
Each	 Weight Each			
	** **	o manala		

								-								rack	TOTAL	B21L
Nos.	 															B21	B21R	
Style	 						-				,					Center	Right	Left
Each	 	4					. ,									\$0.50	. 50	,50
				3	W	e	ig	h	t	E	a	cl	'n	2	2 3/	Pounds.		

		Fo	r No. 4	Track	000000000000000000000000000000000000000	
Nos	 			B41	B41R	B41L
				Center	Right	Left.
					1.60	1.60
Each	 	Weight	Each 7	% Pounds.		

### DOUBLE WALL BRACKETS



For No. 1 7	Frack	
Cente	r Right	B112L Left .70
	B112	The state of the s

### Weight Each 3 1/4 Pounds.

-	For No. 2	Track		
Nos		B212	B212R	B212L Left
Style		Center	Right	
Each		\$1.20	1.20	1.20
	Weight Each 5	1/2 Pound	is.	

		For No. 4 Track		
Nos.		B412	B412R	B412L
Style		Center	Right	Left
Each			2.40	2.40
	We	ight Each 11% Poun	ds.	

### TRIPLE WALL BRACKETS



Style		Center	Right	B113L Left 1.10
Each	Weight I			

For No. 1 Track

	For	No. 2	Track	
Nos.		B213	B213R	B213L
Style			Right	Left
Each	\$	1.60	1.60	1.60
	Weight I	Each 7	% Pound	ls.

	POP NO. 4	Track		
Nos		B413	B413R	B413L
Style		Center	Right	Left
			3.00	3.00
	Weight Each 14	1% Pour	ids.	
	All Above Op	en Stock		

Don No. 4 Though

### TROLLEY TRACK BRACKETS

SINGLE PARALLEL EAR BRACKETS For No. 0 Track ..... B02 B02E Style ..... Center End .20

Weight Each % Pound	
For No. 1 Track  Nos. B12  Style Cente  Each Weight Each 1 % Pounds.	er End
For No. 2 Track   B22	er End
For No. 4 Track   B42	er End

### DOUBLE PARALLEL EAR BRACKETS For No. 1 Track

R122E B122 Nos. . . . . . . . . . . . . End Style ..... Center 1.00 Weight Each 41/2 Pounds. For No 2 Track

Nos.																											B222 Center	B222E End	
Style				٠,							A.	٠		. 4	,					3	,		0		×		Center	End	
Each																										2	\$1.25	1.25	
						V	7	ej	g	h	t		E	a	e	h	5	1/	6		F	,	H	1	n	ds			

For No. 4 Track B422E End Weight Each 15 1/2 Pounds. 3.25

Open Stock.

### For No. 1 Track Nos. . . . . . . . . . . B123 B123E Style ..... Center End Each ...... \$1.35

TRIPLE PARALLEL EAR BRACKETS

End

4.00

1.35 Weight Each 6 1/4 Pounds. Fer No. 2 Track

NOS.	 	. B-23	Bazon
Style	 	Center	End
Each	 	. \$1.50	1.50
	Weight Each 714 Lbs		
	For No. 4 Track		
Nos.	 	. B423	B423E

Each ..... \$4.00 Weight Each 19 1/2 Pounds. Open Stock.

Style ..... Center

### SIDE EAR BRACKETS

For No. 0 Track ...... Воз B03E Style ..... Center End Each ... \$0.20 .20 Weight Each % Pound. For No. 1 Track

Nos.		.B13	B13E
Style		Center	End
Each	TELEVISION CONTRACTOR	\$0.35	.35
	Weight Each 1% Pound	S.	
	Fou No. 9 Twools		

Nos.	 	×					. ,	*																	B23	B23E
Style																	٠					9	0		Center	End
Each			. ,	,	7		G		*						٠,		, e			. 1					\$0.50	. 50
					1	V	ei	g	h	t	H	Sa	ic	h		2	1	í		P	0	u	n	ds	-:	
								1	F	oi		N	ie		2	1	,	r	re	10	1					

Nos. ..... Style ..... B43 B43E Center End 2.25 Weight Each 10 % Pounds. Open Stock.

### TROLLEY TRACK BRACKETS

### ADJUSTABLE WALL BRACKETS



These Brackets are used in connection with No. 444 Style Door Hangers and are so constructed that any bracket can be made an End Bracket by inserting an End Stop and Bolt.

They are furnished in 3 lengths of extension—5, 7½ and 11 in. Other lengths furnished at an additional price.

### With 5 in, Extension

	For Track, Nos.		 4			 							,		1	2
Each \$1.05	Weight Each, Li	bs.	 13	+	•								1	,	2 34	3 14
	Each							,	,	,		4			\$1.05	1.30

### With 71/2 in. Extension

For Track, Nos	1	2	4
Weight Each, Lbs	3	3 3/2	9 16
Each	\$1.20	1.50	3.10

### With 11 in, Extension

For Track, Nos	1	2	4
Weight Each, Lbs	4 1/4	4 3/4	11
Each	\$1.30	1.75	3.40
Onen	Stock		

### CENTER STOP BRACKETS



B17	B27	B47
1	2	4
2 1/2	3	9 14
\$9.50	.60	2.00
	1 2 ½	1 2 2 ½ 3

Open Stock.

### FLOOR STOPS

Steel and Malleable Iron

No. 191—Adjustable for Doors 1 ¾ to 3 ½ in. Thick, Weight Each 2 Lbs...\$0.80







Note-In ordering state Thickness of Door. Open Stock,

### FLOOR GUIDES

Heavy Sheet Steel

No. 195—Adjustable for Doors 1 34 to 3 4 in. Thick, Weight Each 3 Lbs. . \$1.00 Open Stock,





Note—The above Stops and Guides are furnished with flat head wood screws for attaching.

### FLOOR GUIDES



### Heavy Sheet Steel

### GUIDE ROLLS

### Cast Iron, Dead Black Finish

No. 188—2 in. Wheel, ½ in. Lag Screw, Length to Inside of Roll End of Screw 4 % in., Weight Each 1 Lb. . \$0.20 Open Stock.

Cast Iron Wheel, Dead Black Finish

No. 186—2 in, Wheel, Heavy Stamped Steel Frame, Adjustable for Doors 1½ to 2¾ in. Thick, Weight Each 1¼ Lbs. \$0.20

Open Stock.

Cast Iron Wheel, Dead Black Finish

Open Stock.

Cast Iron, Dead Black Finish

No. 189—2 in. Wheel, 1 in. from Floor to Center of Roll, ½ in. Lag Screw Screws into Floor 2 in., Weight Each 2½ Lbs.. \$0.50 Open Stock,

Cast Iron, Dead Black Finish

Open Stock,

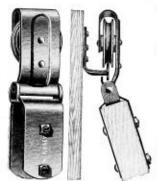


### If Its Automobile Accessories WE HAVE IT

Large Line Shown in Our 500 Page Automobile Accessory Catalogue

### BARN DOOR HANGERS

KING'S CHARM, ROLLER BEARING



Wrought Steel, Hinged Frame, Japanned

Per Dozen Pairs

No. 1902—3 % in. Diameter Gray Iron Wheel.

Apron or Door Strap 5 in. Long, 2 ½ in. Wide and ½ in. Thick,

Punched for 5 in.

Bolts, for Doors 1% in.

Thick \$24.00

A special guard or lug on the hanger, engaging on inside of track, prevents hanger from being thrown off the track.

Weight Per Dozen Pairs 80 Pounds. One Pair in a Box.

### "NONE BETTER"



### Wrought Steel, Roller Bearing, Japanned

No. 1900-1—3 ½ in. Gray Iron Wheel, 11 in. Pendant, Weight Per Dozen Pairs 65 Pounds. \$18.25

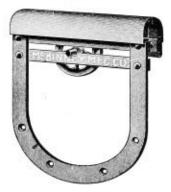
No. 1900-2-3 % in. Gray Iron Wheel, 12 in. Pendant, Weight Per Dozen Pairs 93 Pounds. 22.50

An exceptionally strong and easy running hanger, made of heavy wrought steel. The gray iron wheels are equipped with steel roller bearings. The wheels are covered as a protection against weather conditions. These hangers will operate on any

standard flat track of any length.

One Dozen Pairs in a Crate.

### LOOSE AXLE



Wrought Steel, Japanned

Nos	1901-5	1901-10
Length Run, Feet	5	10
Diameter Wheel, Inches	3	4 14
Length Pendant, Inches	10 %	1136
Weight Per Dozen Pairs, Lbs	200	274
Per Dozen Pairs	\$28.00	36.00

These hangers are made with a traveling wheel for 5 and 10 ft. runs. Wheels are gray iron and protected from the weather by means of a hood or covering. Can be used on any standard flat rail or track.

One-half Dozen Pairs in a Crate.

### BARN DOOR TRACK

KING'S CHARM



Wrought Steel, Japanned

Per 100 Feet

No. 1912-14 in. Wide, A in. Thick, without Screws. \$11.00 In 4, 6, 8 and 10 Foot Lengths, Brackets Countersunk for Screws.

Weight Per Hundred Feet 100 Pounds. Six Pieces of Each Length in a Bundle.

### "NONE BETTER"



Wrought Steel, Japanned

Per 100 Feet

No. 1910—1 ¼ in. Wide, 13 in. Thick, without Screws.\$15.50
In 4, 6, 8, 10 and 12 Foot Lengths.

Weight Per Hundred Feet 105 Pounds,

Four Foot Lengths 12 Pieces; Six and Eight Foot Lengths 8 Pieces; Ten and Twelve Foot Lengths 6 Pieces in a Bundle,

### GARAGE DOOR HOLDERS

S-W



These Holders can be used on doors with square or curved tops.

### Wrought Steel

Per Pair

Weight Per Pair 8 1/2 Pounds.

One Pair in a Box, with Screws and Directions.

### STAY-PUT

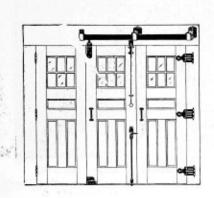


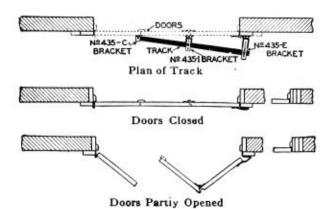
Wrought Steel

One Pair in a Carton, Twelve Cartons in a Case,

### GARAGE DOOR SETS

Best Results Will Be Obtained by Using Doors Not Over 3 Feet in Width



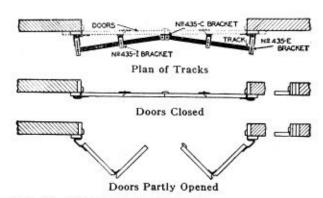


For Openings Up to 9 Feet Wide, Head Room Required 6 Inches

Per Set . \$14.00

One Set in a Box, with No. 31 Track.

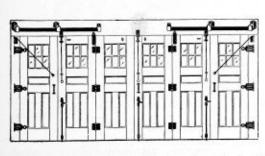


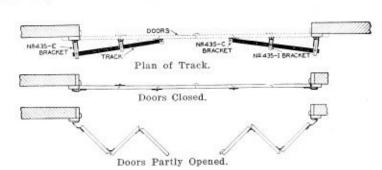


For Openings Up to 12 Feet Wide, Head Room Required 6 Inches

Per Set . \$21.00

One Set in a Box, with No. 31 Track.





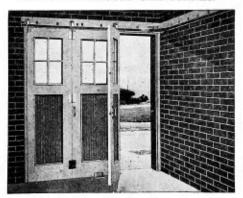
For Openings Up to 18 Feet Wide, Head Room Required 8 1/4 Inches

Per Set \$28.00

One Set in a Box, with No. 31 Track.

### GARAGE DOOR SETS

McKINNEY "AROUND THE CORNER"



Interior View, Service Door Open.

Complete Hardware for Three Doors, for Openings 6 to 10 Feet Wide

The three doors are hinged together as a unit and are equipped with swivel hangers to roll on a continuous overhead track around one corner and along the adjoining sidewall resting flat against the wall on the inside when open. Per Set

Black Japanned
No. 9023—Complete as Enumerated Below in a
Neatly Labeled Wooden Box, Weight Per Set 55 Lbs. ..... .....\$13.00

Contents of Set

1 Curved Section of Track.

8 28-in. Sections of Straight Track.

2 Swivel Hangers for Special Hinges.

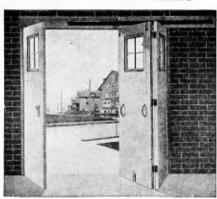
1 Swivel Hanger with Door Bracket. 2 Pairs Hinges, Tight Pin.

1 Pair Special Hinges for Hangers.

4 Door Handles or Pulls. 1 Floor Guide (2 Pieces).

All Screws and Bolts to Install. Complete Directions and Drawings for Applications,

### Mckinney "sliding-folding"



Interior View, Doors Partly Closed.

Complete Hardware for Three Sliding-Folding Doors, for Openings 6 to 9 ft. Wide,

Two doors are hinged together and to one of the side jambs, to slide and fold inside out of the way. The third or service door swings independently from the opposite Black Japanned Per Set

No. 9010-Complete as Enumerated Below on a Neatly Labeled Wooden Box, Weight Per Set

45 Lbs. . . . . . . . . 

Contents of Set

1 Swivel Trolley Hanger.

1 Adjustable End Bracket.

2 Adjustable Intermediate

Brackets. 1 Stationary End Bracket.

3 Section Trolley Track (7ft. in All)

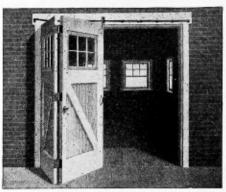
41/2 Pairs Tight Pin Butts. 4x4 in.

1 Foot Bolt, 6 in.

1 Chain Bolt, 6 in.

2 Door Handles or Pulls. All Screws and Bolts to In-

stall. Complete Directions and Drawings for Application. McKINNEY SLIDING-FOLDING



Exterior View, Doors Partly Open. Complete Hardware for Two Sliding-Folding Doors, for Openings 7 to 10 ft. Wide

The two doors are hinged together and to one of the side jambs to slide and fold outside of the garage. Two bolts on the inside operating as a unit hold the doors se-curely closed at top and bottom. These bolts are thrown simultaneously by means of a special handle or lever on the outside of one of the doors.

Black Japanned Per Set No. 9017-Complete as Enumerated Below in a Neatly

Labeled Wooden Box, Weight Per Set 45 Lbs. . \$12.00

Contents of Set 3 Pairs Tight Pin Butts,

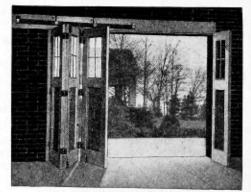
1 Door Hanger Complete.

1 Angle Section of Track.

4 Straight Sections of Track

5x5 in. 1 Cremone Bolt Complete.

(28 in. Each). 1 Door Handle or Pull. All Screws and Bolts to Install. Complete Directions and Drawings for Application.



Interior View, Doors Partly Open.

Complete Hardware for Four Sliding-Folding Doors, for Openings 9 to 12 ft. Wide

Three doors are hinged together and to one of the side jambs to slide and fold inside of the garage. The fourth or service door swings independently from the opposite

Black Japanned No. 9015—Complete as Enumerated Below in a Neatly Labeled Wooden Box, Weight Per Set 

### Contents of Set

1 Swivel Trolley Hanger. 1 Adjustable End Bracket

for Track. Adjustable Intermediat∈

Brackets for Track. End Bracket 1 Stationary

for Track. 3 Section Trolley Track (7 ft. in All. 4½ Pairs Tight Pin Butts,

4x4 in. 1½ Pairs Tight Pin Offset Butts.

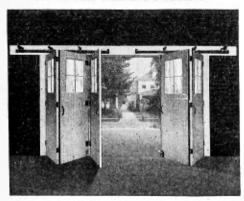
2 Foot Bolts, 6 in.

2 Chain Bolts, 6 in, 2 Door Handles or Pulls.

All Screws and Bolts to Install. Complete Directions and Drawings for Application.

### GARAGE DOOR SETS

Mckinney sliding-folding



Interior View, Door Partly Open. Complete Hardware for Five Sliding-Folding Doors, for Openings 10 to 15 ft. Wide

Three doors are hinged together and to one of the side jambs to slide and fold inside the garage, while the other two doors are hinged together and to the opposite side jamb, both sets of doors meeting in the center when closed. The center door serves as the passage door.

Black Japanned Per Set No. 9018-Complete as Enumerated Below, in Neatly Labeled Wooden Box, Weight Per Set 82 Lbs. . \$30.00 Contents of Set

Swivel Trolley Hangers.

Adjustable End Wall Brackets, 10 in.

Adjustable Intermediate Wall Brackets, 71/2 in.

Adjustable Intermediate Wall Brackets, 4 ½ in. Stationary Wall Brackets.

Sections Trolley Track, (28 in. each). Pairs Tight Pin Butts, 4x4 in. Pairs Tight Pin Offset Butts.

1 1/2

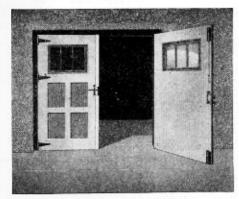
Foot Bolts.

Chain Bolts.

Door Handles or Pulls.

All Screws and Bolts to Install. Complete Directions and Drawings for Application.

### FOR SWINGING DOORS



The doors are held securely closed by means of the foot and chain bolts which are applied to the bottom and top of one of the doors. The wrought steel thumb latch includes two padlock eyes for use in locking the entrance on the outside.

Black Japanned Per Set No. 9032-Complete as Enumerated Below, in Neatly Labeled Carton, Weight Per Set 19 Lbs.....\$8.50

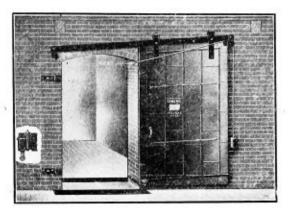
Contents of Set Pairs Extra Heavy Reversed Pad T Hinges.

1 Duogrip Thumb Latch. Foot Bolt, 6 in. 1 Chain Bolt, 6 in. 1 Door Handle or Pull.

All Screws to Apply.

### COBURN FIRE DOORS

PHILADELPHIA STANDARD, INCLINE SLIDE



### Complete with All Hardware With Two Hangers

For Opening, Feet Weight Per Set, Lbs	216	3 179	3 34 186	4 193
Per Set		19.50	20.00	20.50
For Opening, Feet Weight Per Set, Lbs Per Set	201	$5 \\ 212 \\ 21.65$	$5\frac{1}{2}$ $224$ $22.30$	$\substack{ \begin{array}{c} 6 \\ 231 \\ 22.80 \end{array} }$
Wit	h Three I	langers		
For Opening, Feet Weight Per Set, Lbs Per Set		7 264 <b>26</b> , 35	7 1/2 273 27 . 05	8 292 28.25
For Opening, Feet Weight Per Set, Lbs Per Set	302	$9 \\ 316 \\ 29.90$	9 ½ 326 30.60	10 338 31.30

Note-In ordering, give size of wall opening (not door), thickness of door, and state if doors are to be used on one or both sides of wall.

### FIRE DOORS AND SHUTTERS

Without Hardware

Per Square Foot Three-Ply Labeled Doors—2½ in. Thick, 14x20 in. IC 113 Pound Plates, Double Lock Joints, Weight Per Square Foot 734 Lbs Three-Ply Not Labeled Doors—232 in. Thick, 14x20 in. IC 108 Pound Plates, Single Lock Joints, Weight Per Square Foot 6½ Lbs.... .60 Two-Ply Not Labeled Doors-1 % in. Thick, 14x20 in. IC 108 Pound Plates, Single Lock Joints, Weight .50 Per Square Foot 5 Lbs. Two-Ply Labeled Shutters-1% in. Thick, 14x20 in. 65 Weight Per Square 5 Lbs.....

We are prepared to furnish fixtures for fire doors adapted to any requirements and will furnish quotations on receipt of specifications.

### FUSIBLE LINKS



For Fire Doors

Each

No. 96-Used on Fire Door Fixtures, and All Doors and Windows which are Constructed to Close Automatically by Heat, Link Melts at 160 De-Open Stock.

### STRAP HINGES

LIGHT



No. 900-Wrought Steel, Bright, without Screws

Length Each Leaf, In.	Width Joint, In.	Size of Screws	No. of Screw Holes	Dz. Pairs in. Barrel	Wt. Dz. Pairs, Lbs.	Per Dozen Pairs
3	1 1/8	34 x 6	6	225	2 1/2	\$2.00
4	1 1/4	34 x 7	6	150	4	2.50
5	14	1 x 8	8	100	6 1/4	2.95
6	1 %	1 x 9	8	8.0	9	4.20
8	1 %	1 x10	8	48	14 1/2	5.75
10	2 1	1 1/4 x 10	8	32	20	9.85
12	2 34	1 1/4 x 1 2	8	16	33	15.75

Open Stock.

No. SC900—Wrought Steel, Bright, One Pair in a Box, with Screws

Length Each Leaf, Inches	3	4	5	6
Weight Per Pair, Lbs	1/4	%	36	5/8
Per 100 Pairs	\$25.25	29.50	36.15	47.65

HEAVY



No. 902-Wrought Steel, Bright, Without Screws

Length Each Leaf, In.	Width Joint, In.	Size of Screws	No. of Screw Holes	Dz. Pairs in. Barrel	Wt. Dz. Pairs, Lbs.	Per Dozen Pairs
4	1 %	1 x 9	6	100	6	\$2.75
5	1 %	1 x10	8	7.0	10	3.80
6	2 1/2	1 14 x 11	8	38	19	4.65
8	2 7/8	1 1/4 x12	8	20	34	7.75
10	3 11	1 % x14	8	12 1/2	51	11.90
12	4 1/2	1 % x16	10	8 1/2	82	18.25
14	4 %	1 % x16	10	6	91	23.60

Open Stock,

No. SC902—Wrought Steel Bright, One Pair in a Box, with Screws

Length Each Leaf, In.	4	5	6	8	10
Weight Per Pair, Lbs.	3/10	1	1 %	3	4 %
Per 100 Pairs	837.50	46.80	57.65	88 15	126 65

### HEAVY CORRUGATED



Wrought Steel, without Screws

			Per	Dozen P	3178
Length Each Leaf, In.	Width Joint, In.	Wt. Dz. Pairs, Lbs.	No. 935 Bright Steel	No. 1305 Gal- vanized	No. 1305 1/4 Galvanized Brass Pin.
4	1.70	5 1/4	\$3.05	3.80	4.85
5	148	8 1/4	4.20	5.55	7.25
6	2 1/2	15	5.10	8.10	11.05
8	3	25	8.55	13.95	18.45
10	3 %	37 1/2	13.10	21.15	28.50
12	4	6.0	20.10	33.20	42.40

Open Stock.

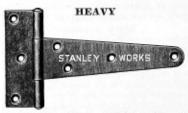
### T HINGES

No. 904-Wrought Steel, Bright, Without Screws

Length Strap, In.	Strapat Jt. In.	Length Joint, In.	of Screws	No. of Screw Holes	Wt. Dz. Pairs, Lbs.	Per Dozen Pairs \$2.15
3	1 10	2 %	% x 7	6	2 %	
4	118	2 %	34 x 7	6	3 1/2	2.65
5	110	3	1 x 8	7	4 %	3.25
6	11/4	3 1/2	1 x 8	7	6 %	3.90
8	1 %	4	1 x 9	7	9 1/2	5.15
10	1 %	4 1/2	1 1/4 x 10	8	13 1/2	7.80
12	2 1/8	4 %	1 1/4 x11	8	20 1/2	10.65
	10	-	Open Stock.			

No. SC904—Wrought Steel, Bright, One Pair in a Box, with Screws

Length of Strap, Inches.	3	4	5	6
Weight Per Pair, Lbs	1/3	3/5	1/2	2/3
Per 100 Pairs	\$25.15	30.50	34.65	45.90



No. 906-Wrought Steel, Bright, without Screws

Length		Length	Size	No. of	Wt. Dz.	Per
	Strapat	Joint,	of	Screw	Pairs, Lbs.	Pairs Pairs
In.	Jt. In.	In.	Screws	Holes		
4	1 70	2 %	1 x 8	6	4 %	\$3.10
5	1 7	3 1/4	1 x 8	7	6 34	3.65
6	1 16	3 1/2	1 x 9	7	8 %	4.30
8	1 %	4	1 x10	7	12	5.70
10	2	4 1/2	1 1/4 x 1 1	8	19	8.65
12	2 16	5 1/2	1 1/4 x 12	9	31	12.60
14	3 1/8	6	1 1/2 x 1 3	11	45	20.05
16	3 1/8	6	1%x14	11	50	27.75
			Open Stock	k.		

### EXTRA HEAVY



No. 908-Wrought Steel, Bright, without Screws

Length Strap,	Width	Length Joint,	Size	No. of Screw	Wt. Dz.	Per
In.	Jt. In.	In.	Screws	Holes	Pairs, Lbs.	Pairs Pairs
4	1 %	3 1/2	1 x10	8	7 1/6	84.25
5	2 1/4	4	1 x10	8	13 14	4.50
6	2 7	4 1/2	1 1/4 x11	8	21	5.65
8	3	5 1/2	1 1/2 x 1 3	9	36	9.65
10	3 1/2	7	1 34 x 14	9	50	13.75
12	3 %	7 34	1 % x16	10	7.8	20.00
14	3 %	7 34	1 % x17	10	82	24.00
16	3 %	7 %	1 34 x 17	11	93	30.00
			Open Stoc	k		

No. SC908—Wrought Steel, Bright, One Pair in a Box, with Screws

Length Strap, In	5	6	8	10	12
Wt. Pair, Lbs	1 1/6	2	3 1/4	5	77.97
Per 100 Pairs	\$54.25	67.15	107.40	145.90	215.6

### T HINGES

### EXTRA HEAVY, CORRUGATED



Wrought Steel, without Screws

Length Strap, In.	Width Strapat Joint, In.	Length Joint, In.	Wt. Doz. Pairs, Lbs.	No. 937 Bright Steel	No. 1307 Galvan.	No. 1307 % Galvan. Brass
4	1 %	3 1/2	6 1/4	\$ 4.70	\$ 5.65	\$ 8.45
5	1 3/4	4	10 1/2	5.00	6.95	11.60
6	2 1/4	4 1/2	17	6.20	9.45	16.95
8	2 34	5 1/2	27	10.60	16.15	27.40
10	3 1/8	7	40	15.15	22.80	38.20
12	3 1/2	7	50	22.00	59.10	56.25

Open Stock.

### EXTRA HEAVY, REVERSED PAD



No. SC963J—Wrought Steel, Japanned, One Pair in a Box, with Screws

Length Strap, In.	Width Strapat Joint, In.	Length Joint, In.	Size of Screw	No. of Screw Holes	Weight Pair Lbs.	Per 100 Pairs
8	3	5 1/2	1 1/2 x13	9	3 1/2	\$111.00
10	3 1/2	7	1 % x14	9	5	156.75
12	3 7/8	7 34	1 % x16	10	7 1/2	224.25
14	3 7/8	734	1 % x17	10	7 %	258.00
16	3 7/8	7 %	1%x17	11	8 %	296.50

### HEAVY, BALL BEARING



No. 1340—Wrought Steel, Galvanized, Brass Pin, One Pair in a Package, with Screws

Length Strap, In.	Width Strapat Joint, In.	Length Joint, In.	Width Pad. In.	Weight Pair, Lbs.	Per Pair
10	3	7	3	4 7/8	\$6.20

### GARAGE DOOR HINGES

BALL BEARING, FULL SURFACE



No. 1456J-Wrought Steel, Japanned

Length Strap, In.	Width Strap, In.	Length Joint, In.	Width Pad In.	Weight Pair, Lbs.	Per Pair
12	3	7	3	6 1/4	\$ 8.00
18	3	7	3	7 %	8.75
24	4	8	3 1/4	14	10.50

These hinges permit the door to be opened entirely clear of the entrance. In applying no mortising is necessary as the pad is set on the door casing and the strap on the surface of the door.

All sizes are corrugated near the joint and equipped with ball bearing washers. Combination holes permit the use of either screws or carriage bolts in applying.

One Pair in a Package, with Screws.

### BALL BEARING, HALF SURFACE

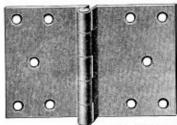


No. 1457J1—Wrought Steel, Japanned Dead Black With 1 to in. Offset.

Length Strap, In.	Width Strap, In.	Length Joint, In.	Width Pad. In.	Weight Pair, Lbs.	Per Pair
10	3	7	2 1/4	6	\$5.75
24	3	7	2 1/4	9	8.00

In applying these hinges the casing only is mortised and the ornamental strap is applied to the surface of the door. One in a Package, with Screws.

### FULL SURFACE BUTTS



Wrought Steel, with Offset

Per Pair

No. 1848—Japanned,
4½x7 in., 1 in., 0ffset, 2 in. Throw, 10
Screw Holes, No.
13 Screws....\$4.80

Weight Per Pair 3½
Pounds.

Three Pairs in a Box,
with Screws.

### SCREW HOOK AND STRAP HINGES



No.	821	-w	rou	ght	Steel
-----	-----	----	-----	-----	-------

Length Strap, In.	Size Strap, In.	Size Screw, Hook, In.	No. of Bolt Holes	Dia. Bolt Holes, In.	Wt. Per 100 Prs. Lbs.	Per Pair
6	14x4	16 x 4 %	2	To & %	197	\$0.42
8	1 14 x 16	1/2 x 4 3/4	2	18 & %	222	.47
10	1 1/2 x 1/4	5% x 6 1/4	3 .	Ta & 38	320	.64
12	1 1/2 x 1/4	% x 6 1/4	3	7.	388	. 75
14	1 1/2 x 1/4	34 x 6 %	3	18	602	1.03
16	1 1/2 x 1/4	34 x 6 %	3	7-	659	1.10
18	1%x14	% x6 %	3	178	793	1.25
20	1 % x %	76 x 8 1/2	4	16	855	1.40
		% x 8 ½	4	10	1025	1.62
22	1%x¼	78 x 8 ½	4	32	1132	2.00
24	2 X 76		4	1/2	1302	2.25
30	2 1/2 X 10	1 x9	*		1533	2.50
36	2 1/2 x 1/6	1 x9	9	1/2	1000	2.00
		Op	en Sto	ck.		

### HINGE HASPS



No. 912-Wrought Steel, Bright, without Screws Length Strap, In. 4 36 6 10 8 1 1/8 1 % 2 3/4 Width Joint, In. 2 18 1 % Size Screws, Nos. 6 1.0 6 10 Screw Holes.... 8 8 8 Wt. Dozen, Lbs. 12 1/2 19 Per Dozen..... \$2.10 2.45 3.25 4.95 7.95 13.75 Open Stock.

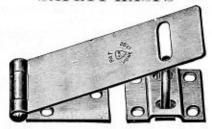
No. SC912—Wrought Steel, Bright, One Pair in a Box, with Screws

Lgth, Strap, In. 3 4½ 6 8 10 12 Per 100......\$26.60 27.25 35.10 50.00 77.90 126.50



Extra Heavy, Wrought Steel, Bright

### SAFETY HASPS



No. 915—Wrought Steel, Bright
Length of Strap, Inches... 3½ 4½ 6
Width at Joint, Inches... 1½ 1½ 1½
Size of Screws, Inches... 7 7 9
Weight Per Dozen, Lbs... 3¾ 4¾ 9⅓
Per Dozen ...... \$3.15 4.20 5.95
One Dozen in a Box.
No. 915C—Wrought Steel, Brass Plated

 Length of Strap, Inches.
 3
 4 ½
 6

 Per Dozen
 \$6.15
 7.70
 10.50

 6 in., One-half Dozen; Others, One Dozen in a Box, with Screws.

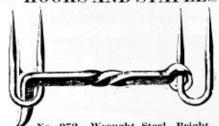
Extra Heavy, Wrought Steel, Bright

### HASPS, HOOKS AND STAPLES



No. 982-Wrought Steel, Bright, with Double Hook, Length, Inches 5 6 Length of Staples, Inches . . 214 2 1/2 Weight Per Dozen, Lbs.... 3 Per Dozen ...... \$1.20 1.40 1.60 Length, Inches .... 8 10 Length of Staples, Inches..... 2 1/2 2 % Weight Per Dozen, Lbs..... 4 1/6 Per Dozen . 81.80 2.50 One Dozen in a Box, with Staples.

### HOOKS AND STAPLES



No. 972—Wrought Steel, Bright
Length, Inches... 3 4 5 6 8
Lgth. Staples, In. 1½ 2 2 2¼ 2½ 2¾
Wt. Gross, Lbs... 12 17 26 30 52
Per Gross ..... \$10.00 12.00 15.00 18.00 30.00
One-quarter Gross in a Box, with Staples.

### SAFETY GATE HOOKS

No. 100— Malleable Hook, Steel Staples, Tinned

 Length, Inches
 4
 5
 6

 Weight Per Box, Lbs
 4
 4½
 5

 Per 100
 822.00
 25.00
 28.00

 Twenty-five in a Box, with Staples

### GATE HOOKS AND EYES

	THE REAL PROPERTY.	► No. 4	0—Brigi Wire	ht Stee
	•			
Length, Inches 1	1 32	2	236	3
Size Wire, Nos 12	10	9	8	7
Wt. Gross, Lbs 1 1/2	3	4 1/3	5 %	8 %
Per Gross \$6.50	6.50	8.00	10.00	12.00
Length, Inches	3 1/2	4	4 36	5
Size Wire, Nos	6	6	5	5
Weight Gross, Lbs	111/2	121/8	15 1/2	161/40
Per Gross	\$14.50	17.00	20.00	24.00
Length, Inches	6	8	10	12
Size Wire, Nos	4	4	4	4
Weight Gross, Lbs	211/6	25	27 %	30%
Per Gross	\$30.00	36.00	42.00	
No. 1040				
Length, Inches 1			236	3
Wt. Gross, Lbs., 1%	3 1/4	4 34	6 1/3	9 1/2
Per Gross \$24.00	24.00	30.00	36.00	46.0
Length, Inches	3 1/2	4	4 36	5
Weight Gross, Lbs	121/2	13	16 %	17%
Per Gross	\$58.00	64.00	76.00	82.0
Length, Inches	6	8	10	12
Weight Gross, Lbs	221/2	261/3	30	33140
Per Gross				170.00
1 and 1½ in., One Gross; ; 6 in., One-quarter Gross; I	to 4 in.	One-ha	lf Gross;	4 1/2 to

### HOOKS AND EYES



No. 60—Heavy Brass Either Right or Left Hand.

 Length, Inches
 1
 1¼
 1½
 2
 2½

 Weight Per Box, Lbs
 ½
 ¾
 1
 1½
 2¼

 Per 100
 \$3.35
 3.60
 3.90
 5.30
 7.30

### One Hundred in a Box. CABIN DOOR HOOKS

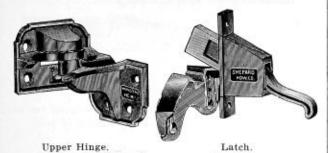


No. 773—Cast Brass, Polished

1 ½ x1 ½ in. Wrought Brass Plates.

Length, Inches. 2 2½ 3 4 5 6 Wt. Dozen, Lbs. 1¾ 1¾ 2¼ 2½ 3 4¾ Per Dozen . . . . 87.20 7.50 8.10 9.00 10.20 11.40 One Dozen in a Box, with Screws.

### GATE HINGES AND LATCHES





Lower Hinge.

### For Gates to Swing Both Ways

		Per Dozen Sets
No.	2C-Set, Hinges and Latch Complete,	Weight Per
	Dozen Sets 38 Lbs	
		Per Dozen Pairs
No.	2H-Hinges Only Weight Per Dozei	n Pairs 29

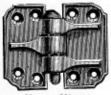
Per Dozen No. 2L-Latches Only, Weight Per Dozen 11 Lbs. \$2.00

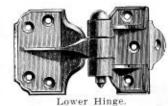
These hinges are strong and require no mortising. The pivots of both the upper and lower hinge are capped to keep out rain or snow. They cannot be disconnected in working, and the gate is held wide open when desired by the construction of the upper hinge.

The latch is enclosed, requiring but a small mortise through the stile, and engages keeper on the post, which is adjustable to meet the sag of the gate.

No. 2C, One Set; No. 2H, One-quarter Dozen Pairs,

No. 2L, One-half Dozen in a Box.









Latch.

Reversible, For Gates to Swing One Way Per Dozen Sets No. 1C-Set, Hinges and Latch Complete, Weight Per Dozen Sets 32 Lbs.....

Per Dozen Pairs No. 1H-Hinges Only, Weight Per Dozen Pairs 22 Per Dozen

No. 1L-Latches Only, Weight Per Dozen 8 Lbs. . . . \$2.00 No. 1C. One Set; No. 1H, One-quarter Dozen Pairs; No. 1L, One-half Dozen in a Box.

### SHUTTER HINGES OLD STYLE, LULL & PORTER



No. 50 Fastening.



Mo	rtise	No. 1 1/2 Fastening.		
Nos	3	2 14	2	1 36
Width Open, Inches	- 3		4 %	5
Throw from Casing, In		1 %	2 %	3 1/8
Fastening Packed with				
Hinges, Nos	1 %	1 1/2	1 1/4	1 1/2
Weight Per Dozen Sets, Lbs.		10	13	15
Per Dozen Sets	\$1.80	2.25	2.60	2.80
Nos	1	0	00	000
Width Open, Inches	5 %	6 1/2	9 1/4	12
Throw from Casing, In	3 1/2	4 1/4	6 1/2	9
Fastening Packed with				
Hinges, Nos.	1 1/2	5.0	50	50
Weight Per Dozen Sets, Lbs.	171/2	3.0	45	60
Per Dozen Sets	\$3.00	6.00	10.00	15.00

No. 3, One Dozen; Nos. 21/2 to 1, One-half Dozen; Nos. 0 and 00, One-third Dozen; No. 000, One-sixth Dozen in a

### BLIND TURNBUCKLES



Cast Iron, Japanned

No. 23—For Wood, 2x2 in. Plate, Wrought Pin...\$1.50 No. 21—For Brick, 4 1/4 in. Spike, Wrought Shank... 1.50 One Dozen in a Box.



### Hand Forged Steel, Dead Black Finish

Pivoted above center so as to stand perpendicular gravity.

6 in. High, % in. Thick, Tapered Ends.

Per Pair No. W-For Wood, One Right and One Left.....\$1.50 No. B -For Brick, One Right and One Left ..... 1.35 Weight Per Pair 31/2 Pounds. Open Stock.

### HINGE HASP STAPLES



No. 913-Wrought Steel, Bright For Hasps, In . . . 3 4 36 Plate, Inches.... 1 1/2 x 1 1/8 1 1/2 x 1 1/4 Wt. Dozen, Lbs.. % Per Dozen..... 80.85 .85 For Hasps, In... 6 8 2x1 1/2 Wt. Dozen, Lbs.. 1 1/6 1 Per Dozen..... 81.10 1.65 For Hasps, In . . . 10 12 Plate, Inches.... 2 3/4 x2 2 34 x2 Wt. Dozen, Lbs.. 3 1/5 Per Dozen..... \$2.65 2.65 Staples for 10 and 12 in. Hasps, Two Dozen; Others, Three Dozen in a Box.

### PADLOCK EYES



### BAR STAPLES





### FOOTMAN LOOPS



Malleable Iron Per Pound No. 2—1 in., Heavy......\$0.35 Open Stock.

### AWNING HINGES



### AWNING TIPS



### LINE CLEATS



Malleable Iron, Galvanized

Malleable Iron, Galvanized



Cast Iron, Galvanized



Cast Iron, Galvanized

No. 117—Heavy, 3% in., Wt.
Per Box 9% Lbs......\$28.00
Twenty-five in a Box.

### AWNING HOOKS

No. 160—Wrought Steel, Plain
Length, In. 1½ 2 2½ 3
Per Gross. \$2.40 2.60 3.00 3.50
Length, Inches. 3½ 4 4½
Per Gross. \$5.50 6.00 7.40
Length, Inches. 5 5½ 6
Per Gross. \$8.60 9.40 10.00
3 in. and Smaller, One Gross; 3½ and 4 in., One-half Gross; Others, One-quarter Gross in a Box.

### STAY NAILS



No. 182—Wrought Steel, Plain Length, In. 5 6 7 Per Gross... \$10.00 11.40 14.00

No. 182T—Wrought Steel, Tinned Length, In... 5 6 7 Per Gross... \$13.00 15.00 19.00 One-quarter Gross in a Box.



No. 183—Wrought Steel, Plain

Length, Inches.... 3 3½

Per Gross ...... \$8.00 9.00

Length, Inches.... 4 4½

Per Gross ..... \$10.00 11.00

No. 183T—Wrought Steel, Tinned

Length, Inches .... 3 3½

Per Gross ..... \$9.60 10.60

Length, Inches .... 4 4½

Per Gross ..... \$12.60 15.00

One-quarter Dozen Gross in a Box.

### MANTEL BOARD HOOKS



No. 173—Wrought Steel, Plain
Length, Inches. 3 4 5
Per Dozen..... \$1.40 1.50 1.60
Length, Inches. 6 7 8
Per Dozen..... \$2.20 2.40 2.60
5 in. and Smaller, Two Dozen; Others,
One Dozen in a Box.

### PICTURE HOOKS



No. 161—Wrought Steel, Plain

Length, In... 4 5 6

Per Gross... \$6.00 8.60 10.00

4 in., One-half Gross; Others, Onequarter Gross in a Box.

### HOT HOUSE OR GARDEN EYES

No. 55—Galvanized

Length, Inches. 4 6 8
Size Wire, Nos. 5 4 4
Per Gross.... \$15.00 21.00 28.00
4 in., One Gross, Others, One-half
Gross in a Box,

### EYE BOLTS



No. 102—Wrought Steel, Galvanized Hand Forged Eye, without Nut.

Size of Rod, Inches... ½4 ft 38 vt 5½ Length Over All, In... 3¾ 4 4½ 5¼ 5¾ 5¾ Diam. of Eye, Inches... ¾4 ¾ 76 1 1½ Wt. Per 100, Lbs... 7½ 1 30 ½ 30 43¾ Per 100 ...... \$13.50 16.00 19.00 28.00 35.00 ¼ to ¾ in., Twenty-five in a Box; Others, Ten in a Box.



No. 83—Wrought Steel, Galvanized

36 in. Rod, 36 in. Diameter Eye, Standard Thread, with
Nut.

Length Over All, Inches. 3½ 4 6 8

Weight Per 100, Lbs... 22½ 25 30 35

Per 100 ...... \$26.00 27.00 34.00 37.00

Ten in a Box.

| No. 93—Wrought Steel, Galvanized | To in. Rod, 1 in. Diameter Eye, Standard Thread, with Nut. | Length Over All, Inches | 4 | Weight Per 100, Lbs | 32 ½ | \$30.00 | Per 100 | Ten in a Box.

### SWING BOLTS



No. 113—Wrought Steel, Galvanized Turned Eye, with Nut.

### RING BOLTS



### SPLIT LINKS



	on t						5								P	е	г	G	г	0	88	
No.	00—1 0—1 %	in.	Long.															81	1	5	50 75	
			One																			

### S HOOKS

	Bright Steel Wire	
	Nos	2812
1	Weight Per Box, Lbs 1 1/4	5%
	Per 100 \$1.05 One Hundred in a Box,	.75

No. 70—Wrought Steel, Bright, Pointed Size, Inches . . . . 1½ 1¾ 2 2½ 3 Wt. Per Box, Lbs. 1¼ 1½ 2¾ 3% 6% Per 100 . . . . . . \$2.90 3.40 3.60 4.70 5.80

### EIGHT HOOKS



No. 3. No. 4. No. 5.

### One Gross in a Box. SCREW HOOKS



No. 122—Wrought Steel, Galvanized Extra Heavy Size of Rod, Inches...... 14 36 Length Over All, Inches.... 2 % Length to Bend of Hook, In. 2 % Length Over All, Inches.... 2 7/8 2 3/8 2 34 3 Weight Per Box, Lbs..... Per 100 ..... \$7.50 9.00 1/2 8/4 Size of Rod, Inches..... 6 Weight Per Box, Lbs..... Per 100 ..... \$21.00 45.00 68.00 1/4 to 3/4 in., Twenty-five; Others, Ten in a Box:

### TRAP DOOR RINGS

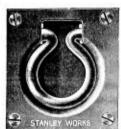


No.	50-Wrought	Steel,	Plain
	Rings On	dy	

Size, Inches 132	2
Weight Per Box, Lbs. 4 1/4	5
Per 100	7.00
Size, Inches	2 1/2
Weight Per Box, Lbs	6 1/4
Per 100	\$8.50
Fifty in a Box.	

### No. 1215J—Flush Wrought Steel, Japanned

Japanned	
Size, Nos 1	2
Size Plate, In, 3x3 1/2	3 1/2 x 3 3/4
Size Wire, In 15	36
Weight Dozen, Lbs 5 1/2	8
Per Dozen \$4.15	5.25
Size, Nos	3
Size Plate, In	3 % x 4 1/4
Size Wire, In	10
Weight Dozen Lbs	10
Per Dozen	\$7.15
No. 1, One Dozen; Others, Dozen in a Box, with So	



### HITCHING RINGS



### Wrought Steel

						Per 100
No.	25-21/2	in.	Ring.	Plain	2.5	\$14.50
No.	27-21/2	in.	Ring.	Galvanized		18.00

Weight Per Box 2 % Pounds. Ten in a Box.



### Wrought Steel, Solid Forged Eye

No.	15-3	in.	Ring.	Plain
No.	17-3	in.	Ring,	Galvanized

Weight Per Box 31/2 Pounds. Ten in a Box.



### Wrought Steel Ring and Swivel

2 % in. Plate, 2 1/2 in. Ring

			Per 100
No.	236 -	-Japanned	 .822.00
No.	237-	-Galvanized	 . 28.00

Weight Per Box 31/2 Pounds.

Ten in a Box.

### HAMMOCK HOOKS



Wrought Steel, Tinned
Per 100
No. 128— & in. Steel, with Screw. \$10.00
Weight Per Box 2 % Pounds.
Ten in a Box.

Wrought Steel, Tinned

Ten in a Box.



### CLOTHES LINE HOOKS



Cast Iron

Plate, Galvanized ....... 1.50 Weight Per Box 3 % Pounds. Two Dozen in a Box.



### DISPLAY HOOKS



Cast Iron

One Dozen in a Box, with Screws.



Cast Iron

No. 151—16% in. Projection, 3x1 in. Base, Japanned. \$4.50

Weight Per Dozen 13 Pounds.

One Dozen in a Box.

### HARNESS HOOKS



Cast Iron, Japanned
Per Dozen
No. 170—7½ in. Projection,
4%x1% in. Base.......\$3.00

Weight Per Dozen 11% Pounds.

One-half Dozen in a Box.



### Cast Iron, Japanned

160

Nos 100	TOT	102
Projection, In. 334	5	5 1/2
Size Base, In . 2 % x1 %	3 1/2 x 1 1/2	3 14 x2
Wt. Doz., Lbs. 2	4 %	6
Per Dozen \$1.90	2.10	2.40
Nos	165	166
Projection, Inches	6 1/4	8
Size Base, Inches	3 1/4 x2	3 % x2
Weight Dozen, Lbs	11	1214
Per Dozen		3.50

No. 160, Two Dozen; Others, One Dozen in a Box.



Cast Iron, Japanned
Per Dozen
No. 172—10 ¼ in. Projection,
10 ½ x2 ¾ in. Base.....\$12.50

Weight Per Dozen 16 Pounds.

Open Stock.



Cast Iron, Japanned
Per Dozen

No. 158—5 % in. Projection,
3 % x1, in. Base...........\$2.00

Weight Per Dozen 7 Pounds.

Two Dozen in a Box.

### SCHOOL HOUSE HOOKS



Cast Iron, Japanned

No. 2—3 in. Projection.....\$1.00

Weight Per Dozen 3 Pounds. Three Dozen in a Box.



Cast Iron, Japanned

Per Gross No. 1089 14 — 3 in. Projection 812.80

Weight Per Dozen 3½ Pounds . Three Dozen in a Box, with Screws.

### CEILING HOOKS



### Cast Iron

2 1/2 in. Projection.

No. J860—Japanned . . . . . \$1.00 No. N860—Bronze Plated . . . . 1.00 Weight Per Dozen 1½ Pounds.

### Cast Bronze

21/2 in. Projection.

Per Dozen No. B860 1/2 —Polished Bronze.. \$6.05

Weight Per Dozen 1 % Pounds. No. 860, Three Dozen; Others, One Dozen in a Box, with Screws.



Six Dozen in a Box.

Cast Iron, Japanned
Per Gross
No. 1162—2½ in. Projection..\$8.00
Weight Per Dozen % Pound.

CEILING HOOKS



2 in. Projection.

No. 082—Coppered . . . . . \$ 3.40 No. 682—Nickel Plated . . . . 6.50

Brass Wire

No. 782—Solid Brass....... 18.00 Weight Per Gross 9 Pounds. One-half Gross in a Box.

### COAT AND HAT HOOKS



Steel Wire

3 in. Projection.

Per Gross

No. 0123—Coppered . . . . . . \$ 2.40

Brass Wire

No. 6123-Nickel Plated .....

No. 7123—Solid Brass...... 17.00 Weight Per Gross 8 % Pounds. One-half Gross in a Box.



Cast Iron, Japanned Per Gross

No. 1870—3 % in. Projection... \$6.65 Weight Per Dozen 1 ½ Pounds. Six Dozen in a Box.



Wrought Steel

3 1/2 in. Projection.

No. B0287112 —Bronze Plated. \$1.78 Weight Per Dozen 14 Pounds. Three Dozen in a Box, with Screws.

4 in. Projection.

Per Dozen

No. B02872—Bronze Plated. . . . 82.00 Weight Per Dozen 2½ Pounds. Two Dozen in a Box, with Screws.

### COAT AND HAT



Cast Brass

3 in. Projection.

No. 03640 —Burnished Brass. \$3.10 No. 3640N—Nickel Plated.... 4.80

Weight Per Box 2 Pounds.

Ten in a Box, with Screws.



Cast Iron

31/4 in. Projection.

		Per Gross
No.	J01032-	-Japanned \$8.90
No.	B1033-	-Bronze Plated 9.80
No.	EA1033-	-Dull Brass 9 . 80
No.	R1033-	-Antique Copper 9.80
No.	E1033-	-Nickel Plated10.80

Weight Per Dozen 2 Pounds.

### Cast Bronze

314 in. Projection.

No. A01034½—Polished Brass. \$5.55 No. E01034½—Nickel Plated, Polished . . . . . . . 6.10

Weight Per Dozen 21/4 Pounds.

No. 01032, Six Dozen; No. 1033, Three Dozen; No. 01034½, One Dozen in a Box, with Screws.



Cast Iron

3 % in. Projection.

			Per Dozen
No.	B03239-	-Bronze	Plated \$1.00
No.	R03239-	-Ant. Co	pper 1.00
No.	EA03239-	-Dull Br	ass 1.00

Weight Per Dozen 21/4 Pounds.

Two Dozen in a Box, with Screws.

### COAT AND HAT HOOKS



Cast Brass 3 in. Projection.

No. 03600—Burnished Brass...\$3.10 No. 3600—Nickel Plated .... 4.80 Weight Per Dozen 2 Pounds. Ten in a Box, with Screws.



Cast Bronze

5 1/4 in. Projection.

No. B02426—Polished Bronze. \$3.35 Weight Per Dozen 74 Pounds. One-half Dozen in a Box, with Screws.



Cast Iron

Height 5 % in., 3 ½ in. Projection.

Per Dozen

No. 322DB—Dull Brass.....\$2.00

Weight Per Dozen 4 Pounds.

One Dozen in a Box.

### COAT AND HAT HOOKS



Cast Iron

Length 4 ½ in., 2 % x1 % in. Base. Per Dozen No. P948-AC—Antique Copper. \$2.20 Weight Per Dozen 5 Pounds. One Dozen in a Box, with Screws.

### HALL TREE HOOKS



Cast Iron

Height 6½ in., 4¼ in. Projection. Per Dozen No. 26-OC—Antique Copper...\$1.60 Weight Per Dozen 6 Pounds. One Dozen in a Box, with Screws.



Cast Iron

Height 7 in., Width 7 in., 3% in. Projection.

No. 28-OC—Antique Copper...\$3.50
Weight Per Dozen 12 Pounds,
One Dozen in a Box, with Screws.

### HALL TREE HOOKS



Cast Iron Height 7½ in.

No. 8242—Antique Copper . . . \$3.00 No. 8262—Dull Brass . . . . 3.00 Weight Per Dozen 8 Pounds. One Dozen in a Box, with Screws.

### ROBE HOOKS



Cast Brass, Polished Per Dozen



Cast Brass, Polished

Per Dozen
No. 5852—1½ in. High, 1¼ in.
Projection ........\$2.60
Weight Per Dozen 1½ Pounds,
Two Dozen in a Box, with Screws.



### COAT AND HAT



Cast Brass Stud



Wrought Steel, Brass Plated Per Dozen



Cast Brass Stud
Brass Tubing Arms and Balls, with
Bolt and Nut.

Per Dozen



Cast Brass, Polished

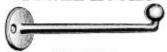
No. 5116—4% in. High, 7 in.
Between Prongs, 4 in. Projection .......\$23.00
Weight Per Dozen 9 Pounds.
One-half Dozen in a Box.



Cast Bronze

4 in. Projection, with Bolt for Marble. Each No. E2425—Nickel Plated, Pol-

### TOWEL HOOKS



Cast Bronze 5 ½ in. Projection.

Per Dozen
No. B1239 ½ —Polished Bronze. \$9.35
No. E1239 ½ —Nickel Plated... 10.20
Weight Per Dozen 3 Pounds.
One Dozen in a Box, with Screws.



Cast Bronze 3 in. Projection.

### WARDROBE HOOKS



Cast Brass 1 % in. Projection.

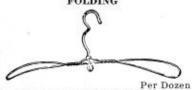
Per Dozen
No. 3561 —Polished Brass...\$3.50
No. 3561-N—Nickel Plated.... 4.00
Weight Per Box 4 Pounds.
Twenty-five in a Box, with Screws.

### RAZOR STROP HOOKS



Cast Brass 1 1/8 in. Projection.

### GARMENT HANGERS FOLDING



No. 1020-Retinned Steel Wire \$1.50 One Dozen in a Bundle,

### TROUSER AND SKIRT HANGERS



Per Dozen No. 1025-2-Nickel Plated . . . . \$1.50 One Dozen in a Box.

### TROUSER AND SKIRT HANGERS



Per Dozen No. 1124-Nickel Plated, Holds 4 Pairs of Trousers or Skirts. \$3.00

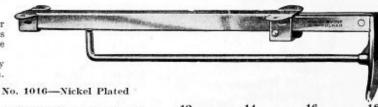
One Dozen in a Box.

### EXTENSION GARMENT CARRIERS

### ROLLEASY

The Rolleasy Fixtures are constructed for Life Time Service. The Trim Nickeled Bar Slides on Noiseless Roller Bearings at a touch of the

These fixtures double the capacity of any closet and keep the garments in better condition.



				1.4
Length, Inches	12	14	16	18
Weight Each, Lbs		1 %	2	2 1/2
Each	\$1.50	1.70	1.90	2.10
Ones Steels				

Open Stock.

### WIRE PICTURE CORD

No.	0	
No.	1	
No.	2	
No.	3	
No.	4	
No.	5	
No.	6	

### Braided Tinned Steel

	2.7	Foot	Coils				
Nos	0	1	2	3	4	5	6
No. of Strands	4	8	12	16	20	24	28
Per Dozen Coils.	\$1.00	1.25	1.50	2.00	2.25	2.75	3.00

25 Yard Coils 1 2 3 Per Dozen Coils. \$2.00 3.00 4.00 5.25 6.50 8.00 9.00 One Coil in a Carton, One Dozen Cartons in a Box.

### 5 Pound Spools

Nos	0	1	2	3	4	5	6
Yards on Spool	1335	670	430	328	259	220	189
Per Spool	\$4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mary Land State State of the		man 6	Stook				

### Brass

### 25 Foot Coils

Nos	10	11	12	13	14	15	16
No. Srands	4	8	12	16	20	24	28
Dozen Coils. \$	2.25	3.50	4.75	6.50	8.25	10.00	11.75
		25	Vard	Coils			

Nos. . . . . . 10 11 12 13 14 15 16 Dozen Coils, \$5.25 9.00 13.50 18.00 22.50 27.00 31.50 One Coil in a Carton, One Dozen Cartons in a Box.

5 Pound Spools 11 12 13 16 Yd. on Spool 1335 670 430 328 259 220 189 Per Spool...\$5.00 5.00 5.00 5.00 5.00 5.00 5.00 Open Stock.

### BIRD CAGE SPRINGS



Solid	Brass

			Per I	Dozen
No.	95—Single		8	\$2.00
		Three Doven in a Roy		



Solid Brass

						Per Dozen
No.	295—Double					\$5.00
		Two	Dozen	in a	Box	

### BIRD CAGE HOOKS



### Cast Iron

Length	7	in.

Per Dozen No. Y3028—Amber Bronzed . . . . . . . . . . . . . ....\$1.85 Weight Per Dozen 6 Pounds. Two Dozen in a Box.



### Cast Iron

1	-en	21	h	9	in.

Per Dozen .....83.35

Weight Per Dozen 54 Pounds. One Dozen in a Box, with Screws.

### TUMBLER HOLDERS



Without Tumbler

Per Dozen

No. 3352-Solid Brass, Highly Polished, Heavily Nickel Plated, Weight Per Dozen One-quarter Dozen in a Box, with Screws.



Without Tumbler

Per Dozen No. 3350-Solid Brass, Highly

Polished, Heavily Nickel Plated, Weight Per Dozen Nickel One-quarter Dozen in a Box, with Screws.

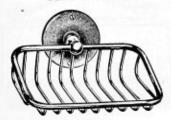
### COMBINATION TUMBLER AND TOOTH BRUSH HOLDERS



Without Tumbler Per Dozen

No. 3351-Solid Brass, Highly Polished, Heavily Nickel Plated, Weight Per Dozen One-quarter Dozen in a Box, with Screws.

### SOAP DISHES



For Wall

Per Dozen

No. 3179—Solid Brass, Highly Polished, Heavily Nickel Plated, Weight Per Dozen One-quarter Dozen in a Box, with Screws.

### BATH ROOM FIXTURES

### SOAP DISHES



For Wall

Per Dozen

No. 3672-Solid Brass, Highly Polished, Heavily Nickel Plated, Weight Per Dozen 

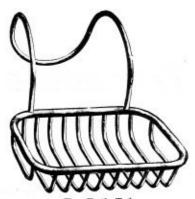
One-quarter Dozen in a Box, with Screws.



For Wall

Per Dozen No. 3527-Solid Brass, Highly Polished, Heavily Nickel Plated, Weight Per Dozen 

One-quarter Dozen in a Box, with Screws.



For Bath Tub

Per Dozen

No. 3252—5 4x4 in., Solid Brass, Highly Polished, Heavily Nickel Plated, Weight Dozen 3 % Lbs. . . \$15.00 One-quarter Dozen in a Box.

### COMB AND BRUSH TRAYS



Per Dozen

No. 2904—Solid Brass, Highly Polished, Heavily Nickel Plated, Weight Per Dozen One-quarter Dozen in a Box, with

Screws.

TOOTH BRUSH HOLDERS



For Four Brushes

Per Dozen No. 3224—Solid Brass, Highly Polished, Heavily Nickel Plated, Weight Per Dozen 

One-half Dozen in a Box, with Screws.

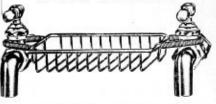
### COMBINATION TUMBLER HOLDERS AND SOAP DISHES



No. 3253-Solid Brass, Highly Polished, Heavily Nickel Plated, Weight Per Dozen 

One-quarter Dozen in a Box, with Screws.

### KITCHEN SOAP DISHES



Adjustable to Any Sink Faucet Per Dozen

No. 182-4x6 in., Solid Brass, Heavily Nickel Plated and Polished, with a Spring on Each End to Fit Over Any Faucet, Weight Per Dozen 

One-half Dozen in a Box.

### BATH ROOM FIXTURES

TOWEL BARS



No. 3168—Brass, Highly Polished and Heavily Nickel Plated

½ in. Bar, 2 in. Wall Plates, 2½ in. Projection.

Length, Inches.... 18 24

 Length, Inches
 18
 24

 Weight Dozen, Lbs.
 4 ½
 5 ¾

 Per Dozen
 \$10.00
 12.00

 Length, Inches
 30



No. 3231—Brass, Highly Polished and Heavily Nickel Plated

 $5\!\!/_{\!\! 8}$  in. Bar,  $2\,5\!\!/_{\!\! 4}$  in. Wall Plates, 3 in. Projection.

 Length, Inches...
 18
 24

 Weight Dozen, Lbs.
 6 %
 7 %

 Per Dozen
 \$16.00
 18.50

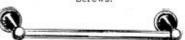
 Length, Inches
 30

 Weight Dozen, Lbs
 9 %

 Per Dozen
 \$21.00



No. 3269—Brass, Highly Polished and Heavily Nickel Plated



No. 3691—Crystal Glass Bar, Nickel Plated Brass Posts

% in. Bar, 2 % in. Wall Plates, 2 % in. Projection.

 Length, Inches
 18
 24

 Weight Dozen, Lbs
 1 %
 1 %

 Per Dozen
 \$26.00
 29.00

 Length, Inches
 30

 Weight Dozen, Lbs
 2

 Per Dozen
 \$33.00

 Posts, One Pair in a Box, with Screws;

 Glass Part Packed Separately.

### ROLLER TOWEL BARS



Per Dozen

No. 3363—18 in. Bar, 2½ in.

Wall Plates, 2½ in. Projection, Brass, Highly Polished and Heavily Nickel

Plated, Weight Per Dozen

SWING TOWEL BARS



### With One Arm

No. 5438 %x15½ in. Arm. 3½x1% in. Base, Solid Brass, Highly Polished, Heavily Nickel Plated, Weight Per Dozen 4 Lbs.\$15.00

One-half Dozen in a Box, with Screws.



### With Two Arms

Per Dozen
No. 5359—%x15½ in. Arms.
3½x15% in. Base, Solid
Brass, Highly Polished,
Heavily Nickel Plated,
Weight Per Dozen 7 Lbs.. \$21.00

One-half Dozen in a Box, with Screws.



### With Three Arms

Per Dozen
No. 5360—%x15½ in. Arms,
3½x1½ in. Base, Solid
Brass, Highly Polished,
Heavily Nickel Plated, Wt.
Per Dozen 10 Lbs.....\$27.00

One-half Dozen in a Box, with Screws.

### WHISK BROOM HOLDERS



One-half Dozen in a Box, with Screws. TOILET PAPER HOLDERS



One-quarter Dozen in a Box, with Screws.

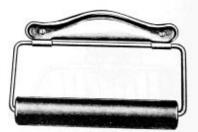


No. 3777—Solid Brass, Highly Polished, Heavily Nickel Plated, with Ebonized Wood Roller, Weight Per Dozen 5 Lbs......\$10.00

One-quarter Dozen in a Box, with Screws.



One-half Dozen in a Box, with Screws.



No. 3445 — Solid Brass Back Bail, Highly Polished and Nickel Plated, Wood Roller, Wt. Per Dozen 4 Lbs......\$4.50

One Dozen in a Box, with Screws.

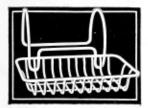
### BATH ROOM FIXTURES

### NAT WIRE "EVERLASTINGLY WHITE"

These Bath Room Fixtures are made of Heavy Highest Quality Steel, uniformly covered with glazed white enamel which will not chip or discolor. They may be washed; hot water and soap have no injurious effect on them. The heavy wires, rods and plates used in their construction are electrically welded uniting the parts into a single piece of great strength and stiffness and also giving an even surface throughout.

Enameled Head Screws Furnished with All Fixtures.

### SOAP DISHES

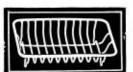


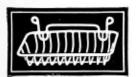
### For Bath Tub

Per Dozen No. 75-WE-Length 5 % in., Width 3 % in., Depth 1 in., Weight Per Dozen 4 % Lbs. \$5.35 One-half Dozen in a Carton.

### For Stand

Per Dozen No. 60-WE-Length 5 % in., Width 3 % in., Depth 1 in., Weight Per Dozen 2 % Lbs. . . . . . . . . . . . . . 84 .00 One-half Dozen in a Carton.





### For Wall

Per Dozen No. 65-WE-Length 5 % in., Width, 3 % in., Depth 1 in., Weight Per Dozen One-half Dozen in a Carton.

### TUMBLER HOLDERS

Per Dozen No. 51-WE-Inside Diameter of Ring 2 % in., Depth of Cup 2 1/4 in., Projection from Wall 4 1/2 in., Weight Per Dozen 1 1/2 Lbs.... \$2.65



One-half Dozen in a Carton.

### SPONGE OR BRUSH BASKETS



For Bath Tub Per Dozen No. 100-WE—Length 7% in., Width 4% in., Depth 3% in., Weight Per Dozen 5 to Lbs.......\$8.00

One-half Dozen in a Carton.

### TOWEL BARS



5/16 in. Bar, 21/4 in. Wall Plates, 31/2 in. Projection Nos. . . . . . . . . . . . . . 512-WE 518-WE 524-WE 12 18 24 Length, Inches ..... 8 54 6 10 Weight Per Dozen, Lbs. . 4 1/6 Per Dozen ..... 6.70 8.00 \$6.00 One-half Dozen in a Carton.

### GLASS SHELVES



No. 77-WE-White Opaque Glass Shelf with Polished Rounded Edges

Brackets with 21/4 in. Wall Plates.

Size Shelf, Inches..... 5x18 5x24 4.00 ..... \$3.60 Each ... Brackets Only-Per Pair..... \$1.00 Shelves, One Dozen in a Case; Brackets, One-quarter Dozen in a Box.

### TOOTH BRUSH HOLDERS



For Five Brushes

Per Dozen No. 187-WE-Length Over All 5% in., 21/4 in. Wall One-half Dozen in a Carton.

### TOILET PAPER HOLDERS



Per Dozen No. 97-WE-2 1/4 in. Wall Plate, Projection 4 in., Tinned Wire Center Guide, Fits Any Size Roll, Wt. Per Doz-

One-half Dozen in a Carton.

### GARMENT HOOKS

Per Dozen No. 913-WE—Handy Hook, 3 in. Pro-jection, Weight Per Dozen % 



Three Dozen in a Carton.

### BATH ROOM FIXTURES

### PERFECT PORCELAIN ENAMELED

These bath room fixtures are made of cast iron with the porcelain enamel fused on at a heat of 1700 degrees Fahrenheit, the same process being used as on bath tubs. The finish is durable and lustrous, easy to keep clean, and is guaranteed not to rust, craze or change color. With ordinary care the finish will last a lifetime. Enameled head screws furnished with all fixtures.

### SOAP DISHES



For Wall, with Removable Opal Tray

Per Dozen

No. P-106—4 % x4 % in.,

Weight Per Dozen

11 % Lbs.......\$16.66

One in a Box.

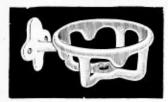




No. P-121—4 ½ x5 ¼ in., Weight Per Dozen 10 ½ Lbs......\$16.00

One in a Box.

### TUMBLER HOLDERS



Without Tumbler

Per Dozen
No. P-150—4½x3½ in.,
Weight Per Dozen
7½ Lbs......\$8.90
One in a Box.

COMBINATION TUMBLER HOLDERS AND SOAP DISHES



Without Tumbler

Per Dozen No. P-148—4½x5½ in., Wt. Per Dozen 13½ Lbs., \$26.66

One in a Box.

### TUMBLER AND TOOTH BRUSH HOLDERS



Without Tumbler

Per Dozen

No. P-149 — 4½x4½

in., Weight Per Dozen

11¼ Lbs....\$17.68

One in a Box.

### RAZOR STROP HOOKS



### ROBE HOOKS





### TOWEL BARS

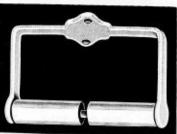


### No. P-5-96 in. Diameter Bar

Length, Inches	18	24
Weight Per Dozen, Lbs	15	18
Per Dozen	\$16.10	19.70

One in a Box.

### TOILET PAPER HOLDERS



No. P-123—5 % x4 in., Weight Per Dozen 9 Lbs...\$15.00
One in a Box.

## WIRE SCREW EYES

Cuts Full Size.

LARGE EYE



1	13.00	1001	57.50	1	2 18	T La	55
2	11.00	1002	48.00	2	2 %	1 76	52
8	9.00	1003	37.00	3	2 74	1 32	99
4	7.00	1004	30.00	4	2 3	1 1/8	64
5	5 80	1005	26.00	5	2 1/8	1 32	3.5
6	4.50	1006	21.00	6	118	33	33
7	3.80	1007	16.00	7	112	58	84
8	3.30	1008	13.00	8	1 %	18	9.5
9	2.80	1009	10.00	9	1 %	3/4	16
10	2.50	1010	9.00	10	1 %	11	7.0
11	2.00	1011	7.00	11	1 15	5/8	23
12	1.70	1012	5.50	12	17/2	31	3/8
	1.50	1013	4.50	13	11/4	35	23
13 14	1.50	1014	3.50	14	1 10	1/2	32
14	4.00						

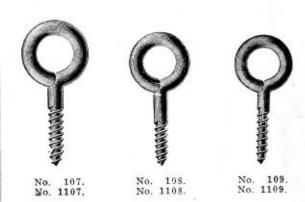
Nos. 000 to 4 and 1000 to 1004, One-half Gross; Others, One Gross in a Box.

## WIRE SCREW EYES

Cuts Full Size.

MEDIUM EYE







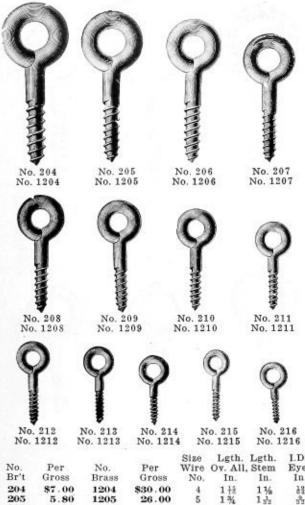
		No. 111. No. 1111.	No. 1112 No. 1112		1113.	No. 111	
No. Bright	Per Gross	No. Brass	Per Gross	Size Wire No.	Length Oyer A In.	Lgth il Stem In.	I. D. Eye In.
104	87.00	1104	\$30.00	4	2 18	1 1/8	81
105	5.80		26.00	5	1 18	1 32	33
106	4.50		21.00	6	1 18	83	TG
107	3.80		16.00	7 8	1 11	38	38
108	3.30		13.00		1 16	18	22
109	2.80	The state of the s	10.00	9	1 70	%	81
110	2.50		9.00	10	1 10	11	18
111	2.00		7.00	11	1 16	98	12
112	1.70		5.50	12	1 1/8	84	82
113	1.50		4.50	13	1	99	34
114	1.50		3.50	14	18	1/2	3/4

One Gross in a Box.

## WIRE SCREW EYES

Cuts Full Size.

#### SMALL EYE



No. Br't	Per Gross	No. Brass	Per Gross	Size Wire No.	Lgth. Ov. All In.	Lgth. Stem In.	I.D. Eye, In.
204	\$7.00	1204	\$30.00	4	1 15	11/8	78
205	5.80	1205	26.00	5	1 %	1 12	
206	4.50	1206	21.00	6	1 %	31	11
207	3.80	1207	16.00	7	1 1/2	33	3/4
208	3.30	1208	13.00	8	1 %	18	15
209	2.80	1209	10.00	9	11/4	3/4	
210	2.50	1210	9.00	10	1 3	11	32
211	2.00	1211	7.00	11	1 70	5/6	13
212	1.70	1212	5.50	12	+9	31	18
213	1.50	1213	4.50	13	7/8	- 17	11
214	1.50	1214	3.50	14	13	1/2	32
215	1.50	1215	3.50	15	18	35	84
216	1.50	1216	3.50	16	11	11	64
		One	Gross in	a Box			

## BIRD CAGE EYES



#### Bright Steel Wire

Per Gross One Gross in a Box.

## WIRE SCREW EYES

Cuts Full Size.

## SHORT SHANK, MEDIUM EYE



114 1/2 115% 1121/2 113 1/2 Nos. 110 1/2 1111/2

No.	100	Size	Length	Length	I. D. Eye,
Bright	Per	Wire	Over All,	Stem,	
Steel	Gross	No.	In.	In.	In.
11036	\$2.50	10	1 1/8	1/2	10
111 36	2.00	11	1	Ya	18
11236	1.70	12	18	%	18
113 1/2	1.50	13	18	33	3,3
114 1/2	1.50	14	18	%	3/4
115 1/2	1.50	15	3%	22	44
11634	1.50	16	11	1/4	1/4
	On	e Gross	in a Box.		

#### SHORT SHANK, SMALL EYE



Nos. 208 1/2	2091/2	2111/2	2121/2	214 1/2	215 1/2	2161/2
--------------	--------	--------	--------	---------	---------	--------

No. Bright Steel	Per Gross	Size Wire No.	Length Over All, In.	Length Stem, In.	I. D. Eye, In.
208 36	\$3.30	8	1 1/8	20	1/4
209 1/2	2.80	9	1 14	20	1/4
210 36	2.50	10	1	1/2	32
2111/2	2.00	11	15	16	Ť
2123/2	1.70	12	3/4	3/8	1 <sup>th</sup>
213 1/2	1.50	13	11	33	र्गेंड
214 1/2	1.50	14	11	3%	32
215 1/2	1.50	15	5/6	32	र्वंद
216 1/2	1.50	16	Ta	22	84

One Gross in a Box.

## STAIR ROD EYES

Cut Full Size.



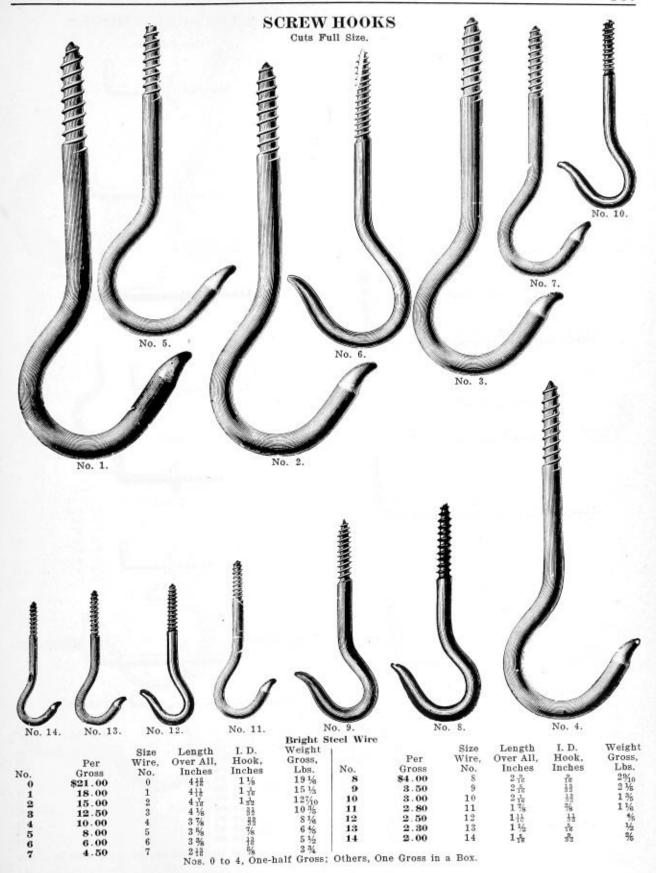
Bright Steel Wire

Per Gross No. 408-Size of Wire No. 9, Length Over All 21/2 in., Length of Stem 11 in., Inside Diameter of Eye 31 in., Weight Per Gross 3 Lbs..... . . \$4 . 50 One Gross in a Box.

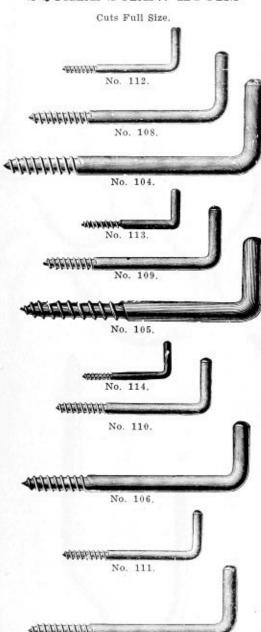
## MOSQUITO BAR EYES

Bright Steel Wire

Per Gross One Gross in a Box.



## SQUARE SCREW HOOKS

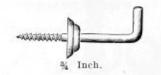


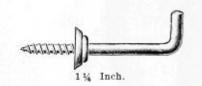
No. 107, Bright Steel Wire

No. 104 105 106 107 108 109 110 111 112 113	Per Gross \$10.00 8.00 6.00 4.50 4.00 3.50 3.00 2.80 2.50 2.30	Size Wire, No. 4 5 6 7 8 9 10 11 12 13	1n. 3 da 2 % 2 % 2 % 2 1 da 1 da 1 da	Lensth Hook In. 1 括為 持 發 長 是 是 是 是 是 是 是 是 是 是 是 是 是 是 是 是 是 是	Weight Gross, Lbs. 57/0 4 ½ 3 ½ 2 ¾ 1 % 1 ½ 9/0 ½
		13	1 3	7	26
114	2.00	14 One Gross in	1	3/8	1/4

## BRASS SCREW HOOKS

Cuts Full Size.











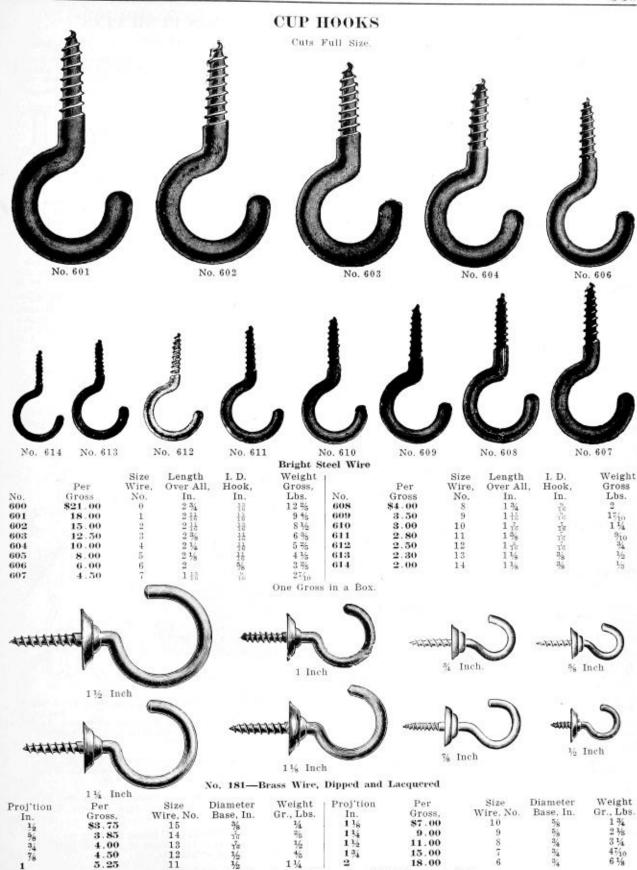




No. 1412—Brass Wire, Dipped and Lacquered

Projection., in. 1/2 5/4	Per Gross, \$3.75 3.85 4.00	Size Wire, No. 15 14 13	Dia. Base, In, 3/8	Weight Gross, Lbs. % % %
76	4.50	12	16	1 710
1	5.25	11	14	11/
1 1/6	7.00	10	54	1 14
134	9.00	9	5/.	1 72
136	11.00	8	78	1 %
1 34	15.00	7	3/	2 1/2
2	18.00	6	34	4 16
17 1 1 1 1 1	2			- 12

½ to 1½ in., One Gross; Others, One-half Gross in a Box.



½ to 1% in., One Gross; Others, One-half Gross in a Box.

## CORNICE HOOKS



No. 30—Bright St	eel Wire,	with Eye	
Length, Inches 3	4	5	6
Weight Gross, Lbs. 6	7 1/2	10 1/2	12
Per Gross \$17.00	20.00	23.00	26.00
Length, Inches	8	10	12
Weight Gross, Lbs	15	19	24
Per Gross	\$30.00	36.00	42.00
One-half Gro	ss in a Be	ox.	

## TELEGRAPH HOOKS

Cuts Full Size.



Solid Brass

Per Gross
No. 701 — 1½ in.
High, 1 in. Projection, Wt. Per
Gross 1¾ Lbs....\$8.00
One-half Gross in a Box.

## DESK HOOKS

Cut Full Size.

#### Solid Brass

One-half Dozen in a Box.



## BRUSH OR DUSTER HOOKS

Cut Full Size.

Cast Brass, Steel Screw

No. 10—% in. Projection, Weight Per Box, 1¼ Lbs. \$11.50 Fifty in a Box.



## MOULDING HOOKS

Brass

Per Gross



No.178.

#### Brass, Polished





Steel

No. 0146—1½ in., Brassed......\$1.50

One Gross in a Box.

#### No. 0146.

## GLASS PUSH PINS

#### MOORE

Moore Push Pins are not to be hammered, but pushed in with an awl-like motion of the hand. Used for hanging up little things on plaster walls or painted woodwork without disfiguring them.





No. 2

Solid Tranparent Crystal Glass Head, Steel Needle Point

Steel Needle Point Per Carton

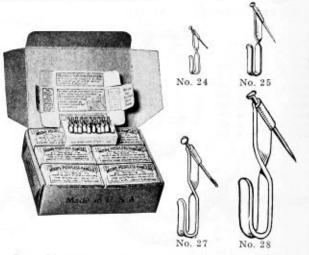
No. C1 — Carton, Contains 1 Dozen Packets No. 1 Push Pins (½ Dozen in a Packet)....\$1.60

No. C2 — Carton, Contains 1 Dozen Packets No. 2 Push Pins (½ Dozen in a Packet).... 1.60

## PUSHLESS HANGERS

#### MOORE

For hanging up pictures, mirrors, racks, nick-nacks, etc. The point is long enough to penetrate through plaster and go into lath or brick.



Brass Plated Steel Hooks, Tool Tempered Steel Nails
Per Carton

Per Gross

## CURTAIN RINGS

	Brass					
0	Nos	16	36		1/2	56
	Nos Inside Diam., In Per Gross		18 ¾ 0.30	18 % .38	16 ¾ .38	14 1 .67
No. 14, 1	in., Six Gross; Others,	Twelve	e Gro	ss in	a B	ox.

## SOLID BRASS RINGS

-	No. 138—Brazed	R.
	Inside Diam., In. 36 14 Per Gross \$2.50 2.75	56 34 3.00 3.50
	Inside Diam., In 78 Per Gross	1 1¼ 5 4.00 7.00
	One Gross in a B	ox.

## SCREW RINGS

No. 18—Brass	
Inside Diam., Inches % Per Gross	.75

## GROMMET RINGS

1	No. 778			
	Inside Diam., Inches Per Gross		. 96 . 90	1.30
	// No. 779—	-Heavy		
	Inside Diam., Inches Per Gross		3.20	$\frac{114}{6.30}$
	One Gross in a Box	Χ.		

## GROMMETS

	Sheet	Brass,	Rolled	Rim,	with Wa	isher
	Nos				1	2
9	Size He serted Per Gro	, Inch	es	18	.80	3% 1.10
	Nos					4
	Per Gro	s ss			770	2.50

## SPLIT KEY RINGS

	Diam	eter.	In	34	1/2	56	34
11	Per	Gross		\$1.50	1.60	1.90	2.25
11	II Diam	eter.	In		76	1	1 1/6
11	Per	Gross			$\begin{array}{c} 76 \\ \mathbf{\$2.50} \end{array}$	2.65	3.25
0	//		One G	ross in	a Box	c.	



#### Ornamental

No.	294—175 in.	Per Gross Diameter\$7.50
	One Dozen	on a Card.

## KEY RINGS

EV3	Ball Pattern
CAS .	No. 100—Nickeled
((	Heart Pattern Per Gross
	No. 862—Nickeled \$8.00
	One Dozen on a Card.

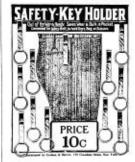




Steel Wire, Nickel Plated

Per Dozen No. 1—Length 2 in., Width ¾ in., Bessemer Steel Wire, Brass Slide, Piano Wire Spring......\$3.00 One Dozen on a Card; One Dozen Cards in a Box.

## SAFETY KEY HOLDERS



Polished Spring Steel

Per Dozen No. 281-Nickel Plated . . . \$2.00 One Dozen on a Card.

## KEY CHAINS

Nickel Plated Steel Per Card No. 9112 Assortment-Three Styles Assorted Chains .. \$3.00 One Dozen on a Card.



## STRAIGHT SPRING BALANCES



#### Light Pattern

Japanned Case, Brass Face, Plain Figures, Tinned Ring and Hook.

Capacity, Lbs	25 x 1/2
Weight Dozen, Lbs	2 1/4
Per Dozen	\$3.00
No	30
Capacity, Lbs	50x1
Weight Dozen, Lbs	4 1/2
Per Dozen	\$6.00
No. 2000, One Dozen;	
One-half Dozen in a	Box.

#### Heavy Pattern

Japanned Case, Brass Face, Plain Figures, Tinned Ring and Hook,

Nos	40	60
Capacity, Lbs	25x1/2	40x1/2
Wt. Dozen, Lbs.	5 1/2	16
Per Dozen	\$8.00	24.00

No	70
Capacity, Lbs	50x1
Weight Dozen, Lbs	10
Per Dozen	\$16.00

Nos. 40 and 70, One-half Dozen; No. 60, One-quarter Dozen in a Box.

#### Extra Heavy Pattern

Japanned Case, Brass Face. Plain Figures, Tinned Ring and Hook.

Nos	80	90
Capacity, Lbs.	80x1	100x1
Wt. Doz., Lbs.	19	39
Per Dozen	\$48.00	84.00

Nos	100	100-A
Capacity, Lbs.		150x1
Wt Doz. Lbs.	4.5	52
Per Dozen	\$96.00	120.00

No.					100-B
Can	acity	Lbs.			200x2
Wei	ght 1	Dozen.	Lbs.		54
Per	Doze	en		. 8	144.00
No.	80.	One-q	uarte	r	Dozen;
No	s. 90	to 100	-B, On	e i	n Box

### ICE BALANCES



#### Nickel Plated Brass Dial Plate

Malleable Iron Case, Black Japanned and Ornamented, Heavy Hook and Ring.

No	160
Capacity, Lbs	300x5
Weight Dozen, Lbs.	66
Per Dozen	\$108.00

Compact and durable, not liable to get out of order. Superior to any other scale on the market.

One in a Box.

#### FAMILY SCALES COLUMBIA



5 1/2 in. Square Steel Top, 6 in. White Enameled Slanting Dial

> Heavy Sheet Steel Frame, Black Enameled and Decorated in Gilt.

No. 6021-Capacity 24 Lbs. by Ounces, 8 1/2 in. High Over All, Covered Regulating Screw, Weight Per Dozen .....\$2.00 51 Lbs. Six in a Case.



51/2 in. Square Steel Top, with Seamless Tinned Scoop, 6 in. White Enameled Slanting Dial

Heavy Sheet Steel Frame, Enameled and Decorated in Gilt.

No. 16021—Capacity 24 Lbs. by Ounces, 12 in. High Over All, Covered Regulating Screw, Weight Per Doz-. . . . . . . . . \$2 . 50 en 60 Lbs.. Six in a Case.



51/2 in. Square Steel Top, 6 in. White Enameled Vertical Dial

Heavy Sheet Steel Frame, Black Enameled and Decorated in Gilt.

Each No. 1021-Capacity 24 Lbs., by Ounces, 91/4 in High Over All, Covered Regulating Screw, Weight Per Dozen 60 Lbs. . . . . . . . . . . . . . . \$2.00 Six in a Case.



5½ in. Square Steel Top with Seamless Tinned Scoop, 6 in. White Enameled Vertical Dial.

Heavy Sheet Steel Frame, Black Enameled and Decorated in Gilt.

Each No. 11021-Capacity 24 Lbs. by Ounces, 12% in. High Over All, Covered Regulating Screw, Weight Per Dozen 78 Lbs. Six in a Case.

#### FAMILY SCALES FAVORITE



Round Steel Platform, 6 in. White Enameled Vertical Dial, 7 in. Glass Sash.

Heavy Sheet Steel Frame, Black Enameled and Handsomely Ornamented, 14x 7 in. Pieced Tin Scoop.

Each No. 1037—Capacity 10 Lbs. by Ounces, with Regulating Screw, Weight Each 12 .....\$7.00 Six in a Case.

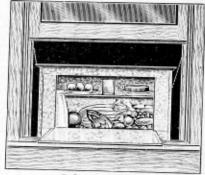
## UNION COUNTER SCALES CHATILLON



Single Brass Beam Black Enameled, Decorated in Gold, Hanging Poise, Cast Steel Bearings,

No. 10—Capacity 240 Lbs. by ½ Oz., with Patent Seam-One in a Box.

## WINDOW REFRIGER-ATORS KENNEDY



Galvanized Steel

Corner Binding Strips and Sloping Top which projects over Sides, Front and Back make for Neatness of appearance, Narrow Slits afford ventila-

No. 24-R—24 in. Wide, 12 in. Deep, 14 in. High, May be Used on Any Window 20 in. Wide or Over, Weight Each

Sets outside the window and its contents are removed from inside the house.

Six in a Crate.

# ICE CREAM FREEZERS



Automatic Twin Scrapers insure automatic, positive and continuous scraping of frozen cream from side of can,

These Scrapers are hung on Dasher so that their lower ends rest on bottom of can and the friction between ends of Scrapers and Can Bottom when in motion moves the Scrapers against sides of can and holds them there positively and continually.

#### Triple Motion, with Crank

Automatic Twin Scrapers, Pine Tub, Electric Welded Wire Hoops, Drawn Steel Bottom Can, Inside Parts Heavily Coated with Pure Tin, Galvanized Outside Parts, Covered Gearing

Ouarts	2	3	4	6
Weight Each, Lbs	9 1/2	111/2	14	18 1/2
Each	\$5.50	6.50	8.00	10.00
Quarts		8	10	12
Weight Each, Lbs		24	30	331/2
Each	8:	13.00	17.00	21.00

The Famous "Wheel Dasher" found in this Freezer, revolves continuously during the final freezing of cream and produces the velvety smoothness secured in hand made ice cream by careful and continued paddling.

Open Stock.

# ICE CREAM DISHERS GILCHRIST AUTOMATIC

Will automatically discharge the ice cream from the bowl without effort. Can be quickly taken apart for cleaning.



#### Nickel Silver Bowl and Scraper

Nos	31-12	31-16	31-20	31-24
Dishes to Quart	12	16	20	24
Weight Dozen, Lbs	8 1/3	8 1/8	8	7 %
Per Dozen	\$24.00	24.00	24.00	24.00
	in a Box	ř		

# ICE SHAVES



Cast Iron, Tinned, Adjustable Steel Blade

Holds enough for just one tumbler full, catches all the ice.

One Dozen in a Box.

# ICE PICKS STANLEY "HURWOOD"



Tempered Steel Needle Point Blade

Two patented projecting wings under the head together with a rivet which passes through the steel ferrule, handle and shank, securely fastens the blade in the handle.

One-half Dozen in a Box.

## ICE PICKS

PERFECT POINT



Tempered Silver Steel Blade, Will Not Bend or Break Per Dozen



Tempered Silver Steel Blade, Will Not Bend or Break Per Dozen

## ICE TONGS



#### BOSTON PATTERN

Good Grade Steel Points and Bows, Plain Handles, Japanned

Per Dozen

No. 1203—Opens 14 in., Weight Per Dozen 33 Lbs......\$23.00 Open Stock.

#### BUFFALO PATTERN

Tempered Chisel Shaped Steel Points, Strong Steel Bows, Japanned

Special small and narrow solid handle, without swell.

Nos	12 28	555 1/2 14 32 32.00
Open Stoc	k.	



X

#### PHILADELPHIA PATTERN

Narrow Tempered Tool Steel Points, Tool Steel Bows, Solid Swell Handles, Japanned

Nos. Opens, Inches Weight Per Dozen, Lbs Per Dozen	547-14 14 33 \$36.00	547-17 17 37 37.00
Open Stock		

## NUT CRACKERS

#### IDEAL

Smooth Malleable Iron, Nickel Plated

Per Dozen

Operates quickly and easily, just a quick, easy turn of the handle and the kernel comes out whole. Used for any nut. Will last forever, no levers, springs or clamps. Nothing to wear out or get out of order.

One in a Box.



## APPLE PARERS

READING



Cast Iron Frame and Gears, Lacquered

Per Dozen

No. 78—11½ in. High

Over All, 6½ in.

Gear Wheel, 1¼ in.

Adjustable Steel Paring Knife, with Automatic Push-off, Wt.

Dozen 45 Lbs...\$24.00

Works perfectly. All parts accurately fitted and put together in the best possible manner.

One Dozen in a Case.

## CHERRY STONERS

DANDY

Heavily Tinned, with Table Clamp

No. 70 — Adjustable for Different Sized Cherries, Automatic Jaw Adjustment, Weight Per Dozen 35 Lbs. \$17.00



The Separator Wheel cannot jam, lock or stick, the Automatic Jaw adjustment feature prevents it.

Unequalled for rapid and effective work. Steel crank will not break. Separator Wheel can be quickly removed and easily cleaned.

One in a Box; One-half Dozen in a Case.

## FRUIT AND LARD PRESSES

BRIGHTON



For Making Jellies, Wines, Fruit Syrups, Tinctures, Lard, Cheese, etc.

A simple, effective, quick acting Press that will extract more juice from the fruit than any other process.

Simple in construction, easily taken apart and cleaned and are practically unbreakable. Screw, side-arms and all parts subject to strain are made of steel.

Tinned all over.

#### To be Screwed to Table or Bench

Nos	2	4	10
Capacity, Qts	2	4	10
Inches2	1x16 1/2 x13 1/4	21x20x17 1/2	22 1/4 x13 1/4 x13
Wt. Each, Lbs	9	20	44
Each	\$5.00	7.50	11.00

No. 2, One in a Carton, Six in a Case; No. 4, One in a Carton, Four in a Case; No. 6, One in a Case.

## MEAT AND FOOD CHOPPERS

UNIVERSAL



Nos. 1 and 2.

Turns the left-over pieces of meat, vegetables, fruits, etc., into delicious, nutritious dishes. Will chop fine or coarse as wanted — without mashing and with great rapidity.

Eliminates waste, cuts down food bills and saves time and work. Self-cleaning, self-sharpening, all parts interchange-

Especially machined cutters are beveled to give a shearlike cutting edge.

One-piece Cast Iron Frame, Spiral Feed Screw, All Finely Tinned Each

No. 0—Small Family Size, Chops 1¼ Lbs. Per Minute, 4 ½ in. High Above Table, Diameter of Hopper 2½x2½ in., Diameter of Barrel 1½ in., 3 Cutters, Coarse, Medium and Fine, Weight Each 3½ Lbs.

No. 1—Regular Family Size, Chops 2 Lbs. Per Minute, 5 ½ in. High Above Table, Diameter of Hopper 2 ¾ x3 ½ in., Diameter of Barrel 2 in., 4 Cutters, Coarse, Medium and Fine and Nut Butter Grinder, Weight Fach 4 ½ Lbs.

No. 3—Hotel and Market Size, Chops 3 Lbs. Per Minute, 7 in. High Above Table, Diameter of Hopper 4x4 % in., Diameter of Barrel 2 ½ in., 4 Cutters, Very Coarse to Very Fine, Weight Each 8 Lbs. \$3.50

One in a Box, Six in a Case.

#### STUFFING ATTACHMENTS



Heavily Nickel Plated

One-piece Seamless Brass Tubing, Spun into Shape,

Per Dozen

Open Stock. GEM



Self-cleaning and self-sharpening, with reversible Steel Cutters that cannot break,

Easy to take apart, easy to put together, easy to adjust, easy to use, and can be cleaned in a jiffy.

Chops rapidly in uniform pieces without mashing, tearing or grinding.

With Five Cutters to Pulverize, Cut Fine, Medium and Coarse, and to make Nut Butter.

One-Piece Cast Iron Frame, Nicely Tinned

Nos	20	22	24
Size	Family	Medium	Large
Capacity Per Minute, Lbs	2	2 1/2	3
Diameter Hopper, Inches	3.1/4	4	4 7%
Diameter Barrel, Inches	2 14	2 1/4	2 1/6
Weight Each, Lbs	5 1/4	5 1/2	8 1/6
	\$3.00	3.75	5.00
One in a Box	Six in	a Case.	

# KRAUT CUTTERS INDIANAPOLIS SANITARY



Maple Frame and Sliding Box

Metal Bed, Triple Pure Block Tinned, Adjustable Tempered Steel Knives, 45 Degree Shear, Keenly Sharpened.

Nos	642	643	644
Number of Knives	2	3	4
Inches	9x27	9x29	9x31
Weight Per Dozen, Lbs.	90	100	110
Per Dozen	\$32.00	36.00	42.00
One-quarter	Dozen in	a Carton.	

## SLAW CUTTERS

T. & D.



White Hard Maple Frame, Hand Finished

Sanitary Metal Bed, Pure Block Tinned, Adjustable Stiff Polished Knives, Forged Wing Nuts.

Nos	632	633
Number of Knives	2	3
Inches	6 % x19 1/2	6 % x21
Weight Per Dozen, Lbs	30	33
Per Dozen	\$18.25	23.00
One-half Dozen in	a Carton.	

Clear Hard Maple, Hand Polished



Non-Adhesive Fluted Bed, Adjustable Polished Tempered Steel Knives.

Nos	622
Number of Knives 1	2
Inches 6x16	6x17 1/2
Weight Per Dozen, Lbs 25	28
Per Dozen \$6.50	8.00
One Dozen in a Carton.	

## CAN OPENERS



PEERLESS

Tempered Cutlery Steel Blade, Nickel Plated.

One Dozen in a Display Box.

#### "SURE CUT"



Nickel Plated Steel Shank, Wood Handle

No. 85—9 in. Long, Two Oil Tempered Steel Cutters, for Square and Round Cans, Milk Bottle Cap Lifter, Weight Per Dozen About 2 Lbs......\$1.60 One Dozen in a Display Box.



Nickel Plated Metal Parts, Black Rubberoid Handle Per Dozen

No. 501-10 in. Long, Two Oil Tempered Steel Cutters, for Square and Round Cans, Milk Bottle Cap Lifter, Weight Per Dozen About 2 1/4 Lbs..\$3.50 One Dozen in a Display Box.

### CAN OPENERS

STAR



Cold Rolled Steel, Brass Studs, Nickel Plated

Opens round, square, flat, oval or slanting cans. Cuts the whole top off clean without touching hands to can. Permits all of the contents to be removed. Prevents injury. One Dozen in a Display Carton.

#### DEACON



#### Malleable Iron, Nickel Plated

Per Dozen

Works like a pair of scissors; cuts off the entire top of either round or square cans.

One Dozen in a Box.

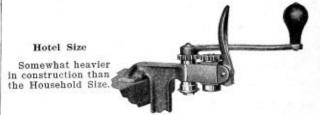
#### BLUE STREAK



Master Size Heavily Nickel Plated

Each
Master — Highest
Grade Tool Steel
Blade, High
Grade Cold Rolled
Steel Gears, Spindle, Etc., Weight
Per Dozen 19 Lbs.
......\$2.00

One in a Box, Twelve in a Display Box,



## Heavily Nickel Plated

Each

Hotel—Housing or Frame of Malleable Iron, High Grade Steel Gears, Spindle, Etc., Highest Grade Tool Steel Blade, Equipped with a Bronze Bushing Reducing Wear, Weight Each 3 Lbs......\$4.00

The Blue Streak removes the entire top of the can cleanly with a very few revolutions of the handle and in such a way as to allow for the contents of the can to be removed whole.

Flange of the can is merely inserted between the cutter and knurled roller, handle turned and top is off—round cans, square cans, oblong cans, flat sardine cans, any shape or size of can.

One in a Box.

## SAD IRONS

ASBESTOS LAUNDRY



Nickel Plated Asbestos Lined Hood

Bottom of Cores Nickel Plated, Tops Aluminum Bronzed, Nickel Plated Asbestos Lined Steel Stand.

Per Set

No. 70 Set—Consists of 3 Oval Cores with 3 1/4 x6 1/2 in. Face, Each Core Weighs 6 Lbs. (with Hood Attached), 1 Pressed Steel Asbestos Lined Hood with Spring Lock and Black Enameled Wood One Set in a Carton, Three Cartons in a Case.





Nickel Plated, Aluminum Caps, Hazelwood Handle

No. 50 Set-Consists of One Polishing Iron, Weight 4 Lbs., One Iron for General Use, Weight 51/8 Lbs., One Iron for Heavy Work, Weight 53/6 Lbs., One Handle and One Stand, Weight Per Set About 15 Lbs. Six Sets in a Box.

## SAD IRON HANDLES

MRS. POTT'S



Hazelwood Handle with Aluminumed Iron Stretcher

No. 15-6 in. Long, 314 in. High, Fits All Makes of Mrs. Potts' Sad Irons, Weight Per Dozen 4 Lbs. \$2.10

One-half Dozen in a Package,

## CLOTHES LINES PLAIN SOLID WIRE

Nº 9 THE MALIN & CO.

Soft Mild Steel, Heavily Galvanized

Per Dozen No. 9-9 Gauge, In 100 Foot Coils, Weight Per Dozen 70 Lbs. . . . . . . . Open Stock.

#### TWISTED WIRE



Soft Steel Wires, Heavily Galvanized, Tightly Twisted

Per Dozen No. 20-6-20 Gauge Wires, 100 ft. in a Coil, Wt. Per Coil 25 Lbs. . . . . . . . . . 86.20 Open Stock.

## CLOTHES LINES

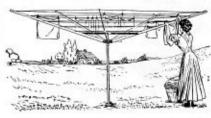
"BLACKBIRD," SOLID BRAID COTTON



All Cotton, Firmly Braided and Smoothly Finished Per Dozen Blackbird-In 50 ft. Hanks, Two Connected, Weight One Dozen Hanks in a Package.

## CLOTHES DRYERS

HILL CHAMPION FOLDING



The Reel is selffastening and locks to post when in use, and being made separate, can be easily removed when not in use. The ground socket is fitted with iron cover, which can be closed when post is taken out.

Painted Selected Wood Arms, Galvanized Steel Tubing Post, Galvanized Malleable Iron Castings

No. 2-Five 6 ft. Arms, Strung with 115 ft. of Best Cotton Line, Weight Each About 38 Lbs. . . . . . \$17.00 One in a Paper Package.

## CLOTHES POSTS

#### DONLEY METAL

Reclaimed Iron Pipe

Each Donley-2 % in Diameter, 9 ½ ft. Long, with Cross Cleat Inserted Near Top for Attaching Clothes Line, Weight Each 34 .....\$2.75 Ornamental Wood Top.......Extra,

Costs less than a wooden post and has every advantage of strength, neatness and resistance to weather and rough usage.

Effectually solves the question of a neat, serviceable permanent clothes post, which, when properly installed, will remain upright for many years.

Usually placed in the ground 2 1/2 feet with or without concrete.

Open Stock.

## DOOR MATS

KEYSTONE FLEXIBLE STEEL



Attractive in appearance and never unsight-Thoroughly braced in every direction, no part to wear out, lasts a life time. Always lies flat and can never warp or curl up at the edges.

Galvanized Crimped Flat Ribbon Steel, Hinged Together with Galvanized Wire Rod, Reinforced Ends

**					
Nos. Inches Weight Each, Lbs Each	16x24	18x30 6 ½ 2.10	3 22x36 9 2.95	4 24x42 14 3.60	7 36x60 30 7.90
	Open	n Stock.			

### O-CEDAR MOPS

"O-Cedar" Mops are made of 5 in. long full cotton yarn, with enameled metal center, amply padded. Equipped with 4 1/2 ft, metal band screw thread handles stained a dark red color; easy to attach or detach.



#### "TRIANGULAR" POLISHING

Pure Cotton Yarn, Treated with O-Cedar Polish

No. 4-Small Size, 4% in. Base, Complete, Weight Per Dozen 

#### "INTERCHANGEABLE" POLISHING

Made with detachable mop pads. Easy to take off and put on. Patented metal clip takes up shrinkage of mop pads in washing.

Pure Cotton Yarn, Treated with O-Cedar Polish Per Dozen

No. 1-Medium Size, 7 in. at Center, Complete, Weight Per Dozen 23 



#### "INTERCHANGEABLE" DUSTING

Pure Cotton Yarn, Dark Red Color, Chemically Treated to Pick Up and Hold the Dust

Per Dozen

No. 5—Medium Size, 7 in. at Center, Complete, Weight Per Dozen 16 ½ Lbs...... No. 6-Large Size, 9 in. at Center, Complete, Weight One Mop in an Attractive Container; Two Dozen in a Carton.



#### O-CEDAR POLISH

Cleans as it Polishes

Quickly produces a rich, dry, lasting, "Velvet" Lustre, without any trace of grease or streaks.

The safest and finest Polish for Pianos, Furniture, Finished Woodwork and Floors-also for Auto-

Its fine quality is uniform from the first to the last drop.



Nos. 125 to

and	60.	300	i La company
77.7		Per l	Dozen
No.	30-4 Oz. Bottle, 2 Dozen to Carton,	Weight	
	17 Lbs		3.60
No.	60-12 Oz. Bottle, 2 Dozen to Carton,	Weight	
	38 Lbs		7.20
No.	125-1 Quart Can, 1 Dozen to Carton,	Weight	
	27 Lbs	221/25	15.00
No.	200-1/2 Gal. Can, 1 Dozen to Carton,	Weight	
	51 Lbs		24.00
No.	300-1 Gal. Can, 1/2 Dozen to Carton,	Weight	
	50 The		36.00

## LIQUID VENEER

## Makes Old Things Look Like New

Will clean, polish and beautify Pianos, Furniture. Woodwork and Automobiles, in one operation. Leaves no streaks, but removes all scratches, stains, dirt and dullness and imparts a beautiful gloss.

Size, Bottle	4 Oz.	12 Oz.	1 Qt.
Dozen in Carton	2	1	1
Weight Carton, Lbs	23	20	5.3
Per Dozen	\$3.60	7.20	15.00



STANDARD Fine Yarn, Full Weight, 52 in. Selected Ash Handle

Size, Oz 16 Wt. Dz., Lbs. 28 Per Dozen \$7.56	3.0	$\begin{array}{c} {\bf 20} \\ {\bf 31} \\ {\bf 9.30} \end{array}$
Size, Oz Wt. Dozen, Lbs. Per Dozen	34	$\frac{28}{36}$ $12.60$
Size, Oz Wt. Dozen, Lbs. Per Dozen	3.8	32 40 14.40
One in a Stron	g Fiber	Bag.

## MOP STICKS

#### Combination Mop and Brush Holder

The Jaws open up sufficiently to take in large size brushes. The Teeth on both Jaws give a firm and positive grip on the Mop Cloth.



Household Size No. 5-Coppered Cast Iron Head and Metal Parts, 5 % in. Jaw, Opened or Closed by Turning the Thumb Screw, 48 in. Polished Hardwood Handle, One Dozen in a Bundle.

## MOP WRINGERS

EAGLE

Selected Louisiana Red Cypress Pail, Seasoned Maple Rollers, Malleable Iron Castings

Pail held together by three Elec-tric Welded Wire Hoops sunk in grooves, Copper Steel Spring Wire Springs, Best Quality Stamped Steel Roller Guides and Foot Holder.

No. 10—Domestic Size, Capacity 10 Quarts, 9 in. High, for Use in the Home, Weight Per Dozen .\$28.00 Crated 150 Lbs..... No. 15-Standard Size, Capacity 14 Quarts, 10 1/2 in. High, Designed for Use in Stores, Barber Shops, Churches, Etc., Weight Per Dozen Crated 180 Lbs. ..

No. 20—Janitor Size, Capacity 22 Quarts, 12½ in. High, Designed for Use in Railroad Stations, Public. State and Government Buildings, Hotels, Etc., Weight Per Dozen Crated 225 Lbs..... 40.00 Nos. 10 and 15, One-third Dozen; No. 20, One-quarter Dozen in a Crate.

## WINDOW CLEANERS OR SQUEEGEES



116 112 114 16 12 14 Length, Inches ...... 7 1/2 9 Weight Per Dozen, Lbs... 6.00 7.00 85 40 Per Dozen ...... One Dozen in a Box.



## HOUSE BROOMS



Finest Selected Broom Corn Five Seams, Sewed with Colored Thread, Tin Lock, No. 1 Plain Finish Handle.

Nos. 30 32 Weight Per Dozen, Lbs...... 26 28 Per Dozen ..... ...On Application One Dozen in a Bundle.

## WAREHOUSE BROOMS



Metal Case, Metal Band, Twine Sewing, Strong Hardwood Handle

Highest Quality, Long Wearing Brooms. Rattan Mixed with Finest Illinois Broom Corn, for Rough Floors

Nos	225	226	227
Weight Per Dozen, Lbs	30	36	42
Per Dozen	\$12.00	13.20	15.60
All Best Illinois Broo	om Corn, for	Smooth Floo	rs
Nos	325	326	327
Weight Per Dozen, Lbs	30	36	42
Per Dozen	\$12.00	13.20	15.60
First Grade Bamboo Fibre Corn, for	Mixed with Factory Flo		Broom
Nos	425	426	427
Weight Per Dozen, Lbs	30	36	42
Per Dozen	\$9.72	10.80	12.96
One Doze	en in a Bund	le.	

#### WHISK BROOMS Medium Grade Corn



Per Dozen No. 3—2 Sew, Hurl Handle, Tin Cap, Weight Dozen One Dozen in a Bundle.

#### FLOOR BRUSHES



Palmetto Center Row, Gray Tampico Next Two Rows, Black Horse Hair Casing, Yellow Block, Two Threaded

riangle rioles,	4.72	п. Роп	shed H	andle	
Nos	914	916	918	920	924
Block, Inches	14	16	18	20	24
Length Stock, Inches	3.34	3 1/4	3 1/4	3 14	3 1/4
Weight Dozen, Lbs	21	24	27	30	36
Per Dozen \$	27.00	30.00	33.00	36.00	42.00
On	e in a	Carton	1.	4.00	

#### GARAGE

Palmyra Fibre, Wire Fastened, Natural Varnished Block, Two Handle Holes, 41/2 ft, Plain Handle Per Dozen Joe-16 in, Block, Stock 4 in, Long, Weight Per Dozen About 26 Lbs......\$24.00 One in a Carton.

## PUSH BROOMS



Genuine African Bass, Solid Hardwood Block, 41/2 Ft. Handle

Per Dozen No. 1126 — 14x3 1/2 in. Block, 5 Rows, 51/4 in. Per Weight Stock, Dozen About 55 Lbs. .....\$16.00 Open Stock.

## STEEL WIRE

Flat Tempered Steel Wire, Two-Piece Hardwood Block, 41/2 ft. Handle Per Dozen

No. 1001 - 12x2 % in. Block, 4 Rows, Length of Wire 5 in., Wt. Doz. About 40 Lbs...\$12.00 Open Stock.



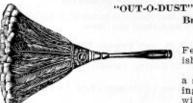
## PUSH BROOM HANDLES

Hardwood, Tapered End, Smoothly Sanded

Per Dozen

No. 45-4 1/2 ft. Long, Weight Per Dozen 15 Lbs....\$2.00 Open Stock.

## FEATHER DUSTERS



Brown Selected Turkey Tail Feathers

Reinforced Cuff, Steel Ferrule, Rubberoid Finish Handle.

Feathers attached to a short wide head, making a flexible duster with wide dusting surface.

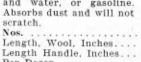
Per Dozen	57.42
Number of Feathers	200
Length, Inches	18
Nos	83

Average Weight Per Dozen 20 Pounds. One in a Sealed Envelope, One-half Dozen in a Carton.

### WOOL DUSTERS "ROYAL BLUE"

Blue Wool, Extra Heavy Nickel Ferrule, Reinforced Cuff, Rubberoid Finish Handle.

The finest duster made and will outwear all others. Washable in soap and water, or gasoline.





Average Weight Per Dozen 9 Pounds. One Dozen in a Carton.



Assorted Bright Colors, Black Enameled Handle

For all Dusting, Washable, Absorbs Dust and will not scratch.

Nos.	2 6
Length Wool, Inches	8 10
	10 12
Per Dozen	
Average Weight Per Dozen 5 F	Counds

One Dozen in a Carton.

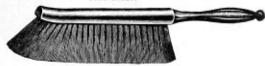
## COUNTER OR BENCH BRUSHES INDUSTRIAL



Mixed Gray Hair, Heavily Filled, Wire Fastened, Natural Polished Block Per Dozen

Industrial-8 in. Long, 21/2 in. Stock, Weight Per Dozen 4 Lbs.....\$12.00 One-half Dozen in a Carton.

#### CAPTAIN



Mixed Gray Fibre, Wire Fastened, Red Polished Block Per Dozen -8 in. Long, 2 % in. Stock, Weight Per Dozen

6 % Lbs. ..... One-half Dozen in a Carton.

#### STEEL WIRE BRUSHES WISCO

Strong and durable and have many uses. They are adapted to painters' use in removing old paint, varnish, etc., from wood, stone and metal; for cleaning architectural iron work, marble, etc., and for varied uses in the home.

#### HANDY BRUSH

For use on metal and painted surfaces where a narrow brush is required.

Best Quality, Fine Carbon Steel Wire Per Dozen No. 1641-4 Rows, Length of Wire 11/8 in., Solid Wood Block, 1 in. Wide, Length Over All 10 in., One Dozen in a Carton.

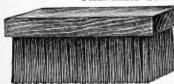
#### BRAZIERS BRUSH



Best Quality Fine Carbon Steel Wire Per Dozen

No. 1651-3x19 Rows, Length of Wire 11/2 in., Solid brushing and cleaning castings, mouldings, etc. Will do the work of coarse sand paper. One Dozen in a Carton.

## PAINTERS SCRUB BRUSH



Best Quality Fine Carbon Steel Wire

Per Dozen No. 1611-6x19 Rows, Length of Wire 1% in., 7 1/4 x 2 1/4 in. Block, Wt. Dozen 9 1/4 Lbs. . . . . . \$8.00

One Dozen in a Carton.

Best Quality Fine Carbon Steel Wire

Per Dozen No. 1632-Curved Face, 9x21 Rows, 11/8 in. Wire, 7x3 in. Block, Weight Dozen 9 % One Dozen in a Carton.



## BUTCHER BLOCK BRUSHES



Flat Tempered Steel Wire

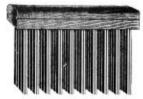
Per Dozen No. 1801-5x10 Rows, 114 in. Wire, 25 x 7% in. Solid Hardwood Block, Weight Dozen 9 ½ Lbs. \$4.85

One Dozen in a Carton.

## WIRE CASTING BRUSHES

Flat Tempered Steel Wire

Wire is securely fastened into solid hardwood block with steel wire pins.



Nos	1734	1736	1737
No. of Rows	4	4	5
Length Wire, Inches	2	3	4
Block, Inches	7 34 x 2 34	7 34 x 2 44	7 % x2 %
Weight Per Dozen, Lbs.	11	111/2	12
Per Dozen	\$5.00	5.50	8.00
01	pen Stock.		

#### CHRISTMAS TREE HOLDERS



Cast Iron, Japanned, Gold Striped

Per Dozen

No. 2-For Trees Up to 2 in. Diameter, Wt. Per Dozen 38 Lbs. 812.00

No. 3-For Trees Up to 3 in. Diameter. Wt. Per Dozen 70 Lbs. 20.00

A tree holder that has withstood the test of practical use for years. Holds the tree firmly and securely.

One in a Carton.

#### BRIGHTON

Cast Iron, Japanned, Ornamented with Gold

Per Dozen No. 50-For Trees from 1 to 4 in. in Diameter, with Three Set Screws and Centering Device which Holds the Tree Secure and Perpendicular, Wt. Per Dozen 50 Lbs. . \$10.00 Made solid so that water can be placed in it, which keeps the tree fresh and green for quite a long time.

One Dozen in a Case.



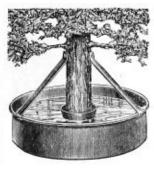
#### NESCO SAFETY



Per Dozen No. 15-14 1/2 x 3 1/2 in., Wt. Per Case 20 Lbs. . . \$15.00

Tree held firmly in socket by three braces on trunk. Water in pan serves as weight and keeps tree fresh and green.

One-half Dozen in a Case.



### WATER PAILS

WOOD



Selected Clear Virginia Cedar, Painted Outside

Three Electric Welded Wire Hoops, Wire Bail with Wood Grip.

Per Dozen

No. EH-1—Capacity 11

Quarts, Top Inside
11% in. Diam., Bottom Inside 8% in.
Diam., Inside Depth
7% in., Weight Per
Dozen 35 Lbs....\$18.00

One-half Dozen in a Bundle.

#### CORDLEYWARE

Indurated Fibre, Seamless, Mahogany Leather Finish, Coppered Steel Wire Bail, Wood Grip



Per Dozen

No. 14—Capacity About 14 Qts., 11½ in. Diameter Top, 10 in. Deep, Weight Per Dozen 50 Lbs.. \$15.00

Especially adapted for handling acids, dyes, and food products. It is a non-conductor of electricity or heat, it is seamless, water-proof, noiseless, rustless, taint and odor proof and virtually indestructible.

It will not shrink or swell. Has no hoops to drop off or rust. Has none of the objectionable rattle and bang of a metal pail or collapse of staves in a wooden pail. Does not require paint or varnish to preserve it.

One-half Dozen in a Carton,



## GALVANIZED

	Plain	
Nos	102	122
Quarts	10	12
Inches		
Wt. Dz., Lbs.	21	25
Per Doz≥n	\$5.60	6.15
Nos	142	162
Quarts	14	16
Inches	11 14 x 10 14	11 1/2 x 10 7/4
Wt. Dz., Lbs.		
Per Dozen	\$6.90	8.35
One Do:	zen in a Bi	indle.

## CEMENT PAILS

HERCULES GALVANIZED

Bottom, without Hoop

No	14
Trade Capacity, Qts	14
Inches	11% x10 1/2
Weight Dozen, Lbs	80
Per Dozen	\$24.00





## JANITORS PAILS



ROCHESTER GALVAN-

Extra Heavy 4X Iron, Straight Pattern, 34 in. Wire Bail

Per Dozen

No. 5614 — Capacity
14 Qts., 10¼ in.
High, 11¼ inch
Diameter Top, 9¼
in. Diameter Bottom, Weight Per
Dozen 48 Lbs. \$12,00

Galvanized by the Hot Dipped Process after being made up from black sheets.

One Dozen in a Bundle.

## HORSE PAILS

"J. I. C."

Can be used for any purpose where a strong, durable pail is required. Bottom is so constructed as to come flush with bottom of staves. Wrought Ears and Side Straps are securely fastened with Rivets.

Selected Oak, Finished and Varnished, Heavily Ironed

Per Dozen

J. I. C.—Capacity 15 Quarts, 3 Heavy Iron Hoops, Iron Bail and Strap Ears, Depth 9 % in., Diameter Top 11 ½ in., Weight Per Dozen 90 Lbs. \$24.00

One-half Dozen in a Bundle,

## REPAIR HOOPS

BOSTWICK ADJUSTABLE



Black Steel, For Pails, Tubs and Barrels

No. 2B— % in. Wide, 78 in. Long, Weight Per Dozen
About 12 Lbs. \$2.40

No. 4B—1½ in. Wide, 80 in. Long, Weight Per Dozen
About 20 Lbs. 3.40

Easy to put on, require no rivets. Are adjustable to any circumference within their length and expand and contract with the tub.

Two Dozen in a Case.

## PAIL AND KETTLE EARS



Wrought Steel, Tinned

wrought	steer,	Tini	iea
Nos	1 1/8 x1	34	30 1 ½ x1 ½ 2 ¾ 1.70
Nos	1 1/2 x1	%	50 1 ½ x2 4 ½ 3 . 80
Nos			60 2x2 ¼ 6 84.60

No. 30.

## FIRE PAILS

#### CORDLEYWARE



Indurated Fibre, Scamless, Ma-hogany Leather Finish, Round Bottom, Galvanized Steel Wire Bail, Wood Grip

Per Dozen No. 12-F-Capacity About 12 Qts., 11½ in, Deep, 10¾ in. Diameter Top. Weight Per Dozen 48 

Will outlast more than twice as long, pails made of any other material. Metal pails rust and wood pails shrink and smell, destroying

One-half Dozen in a Carton.

#### GALVANIZED

#### Plain, Round Bottom

No	212
Trade Capacity, Quarts	12
Actual Capacity, Quarts.	10 1/2
Inches	11x10 14
Dozen in Bundle	1
Weight Bundle, Lbs	
Per Dozen	



## COAL HODS

### GALVANIZED



Open, Plain Body, Round Bottom, Half Oval Japanned Bail

Nos	517	518
Inches	17	18
Wt. Dozen, Lbs.	3.4	38
Per Dozen	\$10.00	10.90

One-half Dozen in a Bundle.

## CUSPIDORS

#### SEAMLESS DRAWN STEEL

#### Low, Broad Base, Raised Bottom, Enameled Green

Sanitary and easily cleaned, practically impossible to tip over.

Per Dozen No. 3-9 1/2 in. Diam., 4 in. High, Wt. Dozen One Dozen in a Carton.



## CAST IRON



Sanitary, Removable Top, White Enameled Inside, Painted Maroon Outside and Striped.

Per Dozen No. 69-8 in. Diameter at Top, 4 in. High, Wt. Dozen 90 Lbs. . . . \$17.00 Open Stock.

## CUSPIDORS

#### CAST IRON



Broad Top, White Enameled Inside, Painted Maroon Outside

Per Dozen No. 67-9 1/2 in. Diameter Top. Open Stock.

## WATERING POTS



#### FUNNELS



Pieced, IC Tin, Fluted Spout, with Ring

Nos	15	20	30	35
Trade Cap., Qts	14	1	2	4
Inches	3 1/2	4 1/2	6 %	8
Dozen in Case	30	30	12	15
Weight Case, Lbs	3.3	41	3.7	50
Per Dozen	\$0.68	.87	1.80	2.42

## GASOLINE FUNNELS

#### DOVER

Heavily Copper Plated, Fine Brass Wire Strainer

The Standard Gasoline Funnel for general use.

The Spout of the Funnel is large and fluted and will not become air bound in the ordinary size tank opening.



..... 277-10T 277-20T 277-40T Capacity, Quarts.... Diameter Top, Inches. 1 5 Height, Inches . . . . . 6 % 9 1/2 42 16.80 19.80

## OIL AND GASOLINE MEASURES DOVER COMBINATION MEASURE AND FUNNEL



Copper Plated, with Lip 05 Capacity, Quarts... 1/2 Bottom, Inches... Height, Inches... 4 3 14 6 11% 6 % Wt. Dozen, Lbs... 10.80 040 020 Nos. Capacity, Quarts... Bottom, Inches... 5
Height, Inches... 10 4
Wt. Dozen, Lbs... 18 4 6 1/2 12 1/8 24 15.00

Nos. 05 and 010, Six Dozen; Nos. 020 and 040, Four Dozen in a Case.

Each

## OIL MEASURES

BROOKINS, ALL-IN-ONE



Notice the practical features of the Brookins All-In-One Measure.

Measure—A one or two quart Standard.

Flexible Metal Spout—Can be placed in any position.

Valve-Under control of thumb lever at all times.

Spring-To keep valve closed unless held open by thumb lever.

Rigid Hook—To keep spout up against measure, when not in use, to prevent dripping.

#### Copper Plated

Nos	2
Capacity, Quarts 1	2
Weight Per Dozen, Lbs 20	23
Per Dozen \$36.00	42.00
Two Dozen in a Package.	

### WAGON MEASURES

#### NEW DOVER

So built and braced that it will prove extremely durable and at the same time be light to handle.

The body is heavily reinforced with three bands and a new sunken arch bottom, which is indestructible. The new bail is reinforced with a wood boss and steel. The front of the neck is strengthened with a steel band.

Accurate as to measure and guaranteed not to leak.

#### Painted Red

## GARAGE FILLERS

DOVER



Heavy Steel, Heavily Galvanized with Blue Stripes

Can be filled from a tank, hose or faucet without spattering and may be poured into a funnel very fast without spilling.

Six in a Case.

#### RADIATOR FILLERS

NEW DOVER

Heavy Steel, Galvanized Eac

No. 277-260R—Capacity 3 Gallons, 9 ½ in. Diameter, 11 ½ in. High, 1 ½ in. Spout Opening, Wt. Per Case 40 Lbs..., \$2.50

Especially designed for garage, filling station and fleet owners. Guaranteed not to leak.

Six in a Case,



## OILY WASTE CANS

NEW DOVER SAFETY



#### Heavy Steel Galvanized After Formed

Heavy seamless cover cannot open over 60 degress and cannot be propped open with the bail. Nonbreakable feet, bottom raised 3 ½ in. from the floor.

Inspected and labeled by the Underwriters' Laboratories, Inc.

Nos	2	3	4	5
Cap., Gals		10	16	19
Diam., In	15	15	18	19
Height, In	19 14	22	23	25.
No. in Case.	3	3	1	1
Wt. Cs., Lbs.	65	70	31	37
Per Dozen	\$5.50	6.65	8.00	9.00

#### JUSTRITE

Works automatically; to raise cover press lever with foot, closes automatically. Lever can also be used as a handle in carrying can. Always leaves both hands free. For the factory, printer, machine shop or garage. Underwriters' label on all cans.



Galvanized Sheet Steel, 24 Gauge Body, 22 Gauge 1/4 in. Band Iron Legs and Foot Lever

Nos	1	2	3
Capacity, Gals	6	8	10
Inches	11% x13	12 1/2 x 14	13 1/2 x 15
Height from Floor, Inches	4	4	4
Weight Each, Lbs	11	13	15
Each	\$4.00	4.50	5.00
Op	en Stock.		

## WASTE RECEPTACLES

HYGEIA AUTOMATIC



Conveniently and sanitarily serves its purpose in the home, in the nurssery, bath and sick room and in the kitchen as a Slop Jar.

It meets the exacting requirements of Doctor and Dentist and is to be found in Hospitals, Public Institutions, First Aid and Rest Rooms. Cover opens and closes automatic-

Cover opens and closes automatically by pressure on Foot Pedal. Cover easily detaches from Frame so Pail with Cover on may be lifted free for emptying.

Handle on pail may be used for carrying complete receiver, both pail and frame.

Heavy Stamped Steel Base, Steel Frame, Heavy Stamped Steel Cover, White Enameled, Armco Rust Resisting Metal Pail.

No. H—Capacity 4 Gals., 12 in. Diameter, 16½ in. High, Weight Each 12 Lbs......\$8.00

One in a Carton.



## WASTE RECEPTACLES

SOLAR SELF-CLOSING



#### Attractive, Convenient, Sanitary and Fireproof

Wherever litter and refuse must be disposed of, there is a use and a need for a Solar Self-Closing Receptacle.

Simple and perfect in operation with no complicated mechanism and nothing to wear out. Only the highest grade materials and workmanship go into its production.

## Easy to Use, Easy to Empty

Two outstanding features place the Solar in a class all by itself. The Self-Closing Top swings

open at a touch to receive deposits, yet is always closed when

not in use. It is a real protection against fire, an automatic guard to sanitation.

The method of removing the contents is the other outstanding feature. Removable inner containers of suitable forms for various kinds of litter and refuse afford an easy means of removing the contents without touching them, efficient, clean and convenient.

Nos. 5 and 10 are furnished with 25 paper bags, No. 15 with a removable galvanized can and No. 30 with one burlap bag.

#### Heavy Gauge Steel, Green Enameled

Nos	5	10	15	30
Base, Inches		11 1/2 x 11 1/2	11 1/2 x 11 1/2	16x16
Height of Body, In	13	1714	34	25 1/2
Height Over All, In	17%	23 1/4	40	33 %
Weight Each, Lbs	11	20	40	4.5
Each	\$6.60	7.20	11.00	11.50

#### White Enameled

Nos	5-W	10-W	15-W	30-W
Each				

One in a Corrugated Cardboard Carton.

## UNDERGROUND GARBAGE RECEIVERS

#### MAJESTIC

Top consists of Cast Iron Ring, Lid and Foot Lever. Both the lid and the ring are hinged to the shell.

Always out of sight - underground-where flies and vermin can't get at it and where dogs can't upset it. It is sanitary and odorless, handy and convenient.

A slight pressure on the foot trip raises the lid.

## Keystone Copper Steel Shell, Solid Bottom, Heavy Plain Gal-vanized Garbage Can

Nos	20
Capacity Can, Gallons	20
Diameter Shell, Inches	19
Depth Shell, Inches 25	26
Weight Each, Lbs 60	80
Each \$11.40	14.70

#### EXTRA PLAIN CANS For Majestic Garbage Receivers

Nos												20-C
Weight Each,	Lbs.										16	22
Each		 	2		0	1	d		•	٠.	\$3.50	4.50

## ASH OR GARBAGE CANS

KING



#### Extra Heavy, Corrugated, Galvanized

Extra Heavy Black Steel, Hot Galvanized After Being Made Up. Lock Seamed, Securely Riveted Reinforcing Hoops, Straight Edge Corrugations, Seamless Bottom, Seamless Tight Fitting Cover, Drop Side Handles.

Nos	1	2	3
Cap., Gals	19	27	37
Diam., In	15	18	21
Height, In	29	29	29
Wt. Each, Lbs.	25	32	38
Each	\$4.80	5.30	6.70

Open Stock.

#### WINTON

#### High Grade Galvanized Steel, Top and Bottom Striped in Red

Deeply Corrugated, Bottom anad Cover, Side Drop Handles Riveted On.

Each No. 117-Capacity 20 Gallons, 17 1/2 in. Diameter, 24 in. High, Weight Each 12 1/2 

Open Stock.



#### KEYSTONE

#### Hot Galvanized, Corrugated

Heavy Sheet Steel, Deeply Corrugated, Seamless Cover and Bottom, Drop Side Handles Riveted on.

Nos	12	13
Cap., Gals	18	23
Diam., In	15%	171/2
Height, In	22	22
Wt. Each, Lbs	14	16
Each	\$4.00	4.50

Open Stock.



## GARBAGE PAILS

KING

#### Heavy, Corrugated, Galvanized, with Bail

24 Gauge Black Cold Rolled Steel Hot Galvanized Throughout, Hot Galvanized After Being Made Up, Seamless Cover and Bottom.



Nos	7	8	9
Capacity, Gallons	5	7	9
Diameter, Inches	11 1/2	13	14 1/2
Height, Inches	12 %	12 %	12 34
Weight Each, Lbs	9	10	11
Each	\$1.80	2.00	2.20

Open Stock.

## RUBBISH BURNERS

CYCLONE "CATCH-ALL"



A Combination Waste Paper Container and Rubbish Burner

Is also used extensively for storing fruits and vegetables. Keeps contents off floor and allows free circulation of air.

Made of heavy crimped wire, 1 ½ in. Square Mesh, electrically welded. Wire Cover and Bottom.

#### Baked Green Enamel Finish

## ASH SIFTERS

#### HILL ROTARY

Galvanized Iron, Heavy Galvanized Wire Cylinder Sieve

No. 2—Fits a 20 in. Can or a Sugar Barrel, Holds Twice as Much as No. 1, Wt. Each 32 Lbs...9.00

HUSTLER ASH SIFTER THE PROPERTY OF THE PROPERT

Sifts the coal clean without dust or dirt. Is easily operated and gives universal satisfaction.

Two in a Crate.

## ASH PIT OR CLEANOUT DOORS



Cast Iron, Japanned

Each
No. 2—12 % x14 % in.
Frame, 9 % x11 % in. Door, 9 ½ x11 % in. Opening, 1 % in.
Flange on Under
Side, Weight Each
14 Lbs. . . . . . \$2.25

Three in a Bundle.

## FLUE OR CHIMNEY RING

Cast Iron

Inside Diam., Inches.	4	5
Flange, Inches	12	3/4
Width Under Flange,		
Inches	2 1/8	2 16
No. in a Bundle	12	12
Weight Each, Lbs	1 1/2	2
Each	\$0.16	.25



Inside Diameter, Inches	6	7	8	9
Flange, Inches	11	11	18	1
Width Under Flange, Inches.	$\frac{2}{16}$	2 3%	2.5%	3
No. in a Bundle	12	12	12	6
Weight Each, Lbs	2 1/2	3 1/2	3 1/2	6
Each	80.27	.34	.38	.78

# COAL WINDOWS AND COAL CHUTES

#### MAJESTIC BREAK-PROOF

Majestic Break-Proof Coal Windows and Chutes have Keystone Copper Steel Bodies and Hoppers. Bodies Reinforced with Angle Iron. Certified Malleable Iron Frame and Hinges. The Patent Hinge holds the door open and protects the building above when coal is delivered. When closed, the gravity latch automatically locks the door flush with the foundation. It can be unlocked from the inside only, from anywhere in the basement or from the room above by simply extending the latch chain.



#### Certified Malleable Iron Door Fitted with Wire Glass Panel

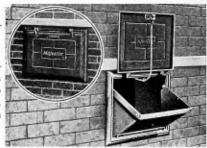
The ¼ in. wire glass panel is protected by a steel shield when open. When closed, the shield lies flat in the bottom allowing daylight to enter the coal bin. Body has a sloping bottom. Equipped with chain to latch.

Each

No. M-10-A.—With Hopper, Wall Opening 24 in. Wide, 17 in. High, 12 in. Deep, Wt. Each 63 Lbs.\$15.75

#### Solid Pressed Copper Steel Door Electro Galvanized

Body has a sloping bottom and is reinforced at top with angle iron. Equipped with chain to latch.



No. M-101-B

Each

No. M-101-B—With Hopper, Wall Opening 24 in. Wide, 17 in. High, 12 in. Deep, Wt. Each 52 Lbs. \$12.00

#### Solid Pressed Copper Steel Door, Electro Galvanized

Same as the No. M-101-B but with straight bottom; without hopper and latch chain. Each

No. M-500—Without Hopper, Wall Opening 24 in. Wide, 17 in. High, 9 in. Deep, Wt. Each 35 Lbs. 89.00

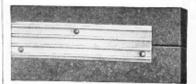
## LINOLEUM SEAM BINDING



Embossed Brass

Per Box

No. 16—% in. Wide, 30 Gauge, for Covering Seams in. Linoleum, Etc., Weight Per Box 5 ¼ Lbs... \$3.75 50 Yards in a Box, with Nails.



Embossed Brass Per Box

No. 17—¾ in. Wide, 30 Gauge, for Covering Seams in Linoleum, Etc., Wt. Per Box + ¼ Lbs. . . . . 83.00

50 Yards in a Box, with Nails.

## STOVE BOARDS

CRYSTALLIZED



#### Selected Coke Tin Plate

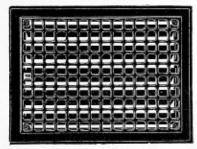
Crystallized excepting the design, which is bright fin-ished, outlined in black, covered with highest grade Baking Varnish producing a beautiful silver effect,

No. 9-Square, Heavy Red Express Paper Lined

		The state of the s	
Size, Inches	24x24	26x26	28x28
Weight Per Dozen, Lbs	34	39	4.5
Per Dozen	\$12.00	12.50	14.00
Size, Inches	30x30	32x32	35x35
Weight Per Dozen, Lbs	52	59	7.0
Per Dozen	\$16.00	18.50	24.00
One Dozen	in a Case		

## REGISTERS

REGULAR FLOOR, WROUGHT STEEL



No. 200J—Re	gisters, Bla-	ck Japanned
-------------	---------------	-------------

Floor Opening, In .	8x10	9x12	10x12	10x14	12x15
Wt. Each, Lbs	4 1/4	5	5 %	7	9
Each	\$1.65	2.10	2.40	3.15	4.50

No. 250J-Face Plates, Black Japanned

Floor Opening, In .	8x10	9x12	10x12	10x14	12x15
Wt. Each, Lbs		2 1/4	2 1/2	3 1/2	
Each	\$1.10	1.45	1.70	2.20	2.90

No. 200W-Registers, White Japanned

Floor Opening, In .	8x10	9x12	10x12	10x14	12x15
Wt. Each, Lbs		5	5 34	7	
Each	\$2.00	2.55	2.90	3.80	5.40

No. 250W-Face Plates, White Japanned

Floor Opening, In .	8x10	9x12	10x12		
Wt. Each, Lbs	2 .	2 1/4		3 1/2	
Each	81.45	1.99	2.20	2.85	3.80

Correspond in size with the Standard Cast Iron makes. Have a Uniform Depth Open of 25 in., Closed 11/2 in.

ALCOHOLD TO THE PROPERTY OF THE PARTY OF THE				
Floor Opening. Face Over All,		8x10 9 34 x11 34	9x12 10 %x13 %	10x12 11 }5 x13 }8
Floor Opening. Face Over All,	Inches.		10x14 11 }8 x15 %	12x15 13 \{\xi x17
		-		

One in a Box.

## GEM REGISTER SHIELDS





Model No. 1.

Model No. 2.

For Warm Air Furnace Registers, Oxidized Copper Finish Adjustable from 10 to 19 in. to Fit Any Size Register.

No. 1—For Floor Registers...... .\$1.50 No. 2—For Wall Registers..... . 75

## STOVE POKERS

STOVER



	Straight Per	Dozen
No.	100-20 in. Long, 1/4 in. Diameter Rod, Coiled	
	Wire Handle with Ring, Nickel Plated, Weight	
	Per Dozen 5 1/2 Lbs	\$1.50
No.	140-24 in. Long, % in, Diameter Rod, Coiled	
	Wire Handle with Ring, Nickel Plated, Weight	
	Per Dozen 11 Lbs	2.25
	One Dozen in a Box.	

#### FIRE SHOVELS "NEVERBREAK"



Forged Steel, Japanned
Hollow Hand Grip Prevents Heating, Blade and Handle
Forged from One Piece of High Grade Bar Steel.

Nos NF-10	NF-16
Scoop, Inches 8x5 1/2	8x5 1/2
Length Over All, Inches	24
Weight Per Dozen, Lbs	20
Per Dozen \$6.50	7.00

JUMBO



Stamped Sheet Steel, Black Baked Enamel

Per Dozen

No. 2-Scoop 5 in. Wide, 21/2 in. Deep, Length Over All 21 in., Weight Per Dozen 11 Lbs. . . Handle is covered and reinforced, scientifically correct and equal to a burden ten times the shovel capacity. Strengthening corrugations at the mouth increase the capacity of the shovel. A real fire shovel suited to every

FULTON

purpose, holds twice as much as an ordinary shovel.



Stamped Sheet Steel, Black Japanned Round Handle, Corrugations at Mouth of Scoop,

No. 3—Scoop 4½ in. Wide, 1½ in. Deep, Length Over All 19½ in., Weight Per Dozen 8 Lbs....\$1.25

Stamped Sheet Steel, Black Japanned Flat Handle, Corrugations at Mouth of Scoop. Per Dozen

No. 6—Scoop 4 ½ in. Wide, 1 in. Deep, Length Over All 14 ½ in., Weight Per Dozen 4 Lbs......\$0.75 All Above, Open Stock.

## RADIANT HEATERS

ADAMS CHEERFUL, GAS



"It's All in the Adams Patented Central Draft Burner"

Suction produced by gas passing from the needle valve draws air into the mixing chamber, where the air and gases are thoroughly mixed. As this mixture passes out of the burner tips, and burns, additional air is drawn into the flame through the central draft flues, assuring complete combustion. There are no screens, small gas or air passages to become obstructed

and interfere with continuous proper combustion.

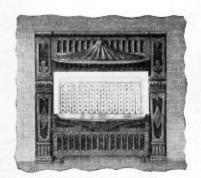


Antique Brass Finish

Each

Especially suited for large fireplace openings. Delicate refinement of detail results in an article of superior beauty both in design and finish.

One in a Case.

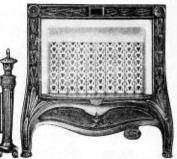


Antique Bronze Finish

Each

Built-in fireplace grates are excellent replacement units for asbestos fronts, etc. On new work, they save the cost of tile work in opening. Easily installed.

One in a Case.

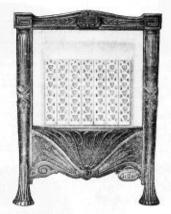


Bronze Finish

No. 10—10 Radiants, 22 in. High, 22 in. Wide, 7 in. Deep, Shipping Weight Each 56 Lbs.......\$33.50

Well designed and constructed of high grade cast iron throughout. A beautiful and highly efficient heater.

One in a Case.



Bronze Finish

No. 11—7 Radiants, 21½ in. High, 16¼ in. Wide, 7 in. Deep. Shipping Weight Each 45 Lbs......\$21,75

A small size of Cheerful Radiant Heater of the same general construction as the larger heater. Highly efficient and pleasing in design.

One in a Case.



Antique Brass Finish

No. 4-10 Radiants, 21 in. High, 23 in. Wide, 7 in.

Deep, Shipping Weight Each 59 Lbs......\$41.25

Statuary Bronze Finish

No. 4-SB—Same as No. 4, Except for Finish......\$41.25

Cast metal construction throughout. An extremely beautiful design, it is the most popular of all Cheerful Radiant Heaters.

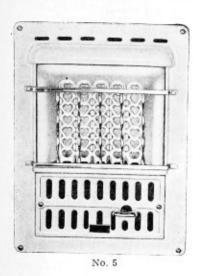
One in a Case.



Nickel Plated, Polished

A small, efficient Adams Cheerful Radiant Heater of cast iron construction.

One in a Case.



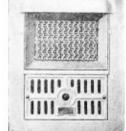
## RADIANT HEATERS

ADAMS CHEERFUL, GAS

White Porcelain Enamel Finish

Each No. 5-Fine Radiants, 19 in. High, 14 in. Wide, 4 in. Deep, Wall Opening 1814 in. High, 3 in. Wide and 4 in. Deep, Shipping Weight Each 

Designed for installation in a recessed wall opening. Extensively used and is especially suited for bathroom. One in a Case.



No. 13-E.

ADAMS CHEERFUL, ELECTRIC

White Porcelain Enamel Finish

No. 13-E-For 110-120 Volts, 1300 Watts, Wall Opening 16% in. High, 13 

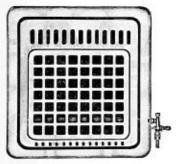
Ideal for use in bathroom. Rugged in construction with all the heating element perfectly supported and protected. All parts easily accessible.

One in a Case.

## GAS HEATERS

For Natural or Manufactured Gas

#### REZNOR WALL-HANG TYPE



White Porcelain Enamel Finish

No. 32 -- 1616 in. Wide, 17 in. High, 4 1/2 in. Deep, Shipping Weight Each 18 Lbs...... \$15.00

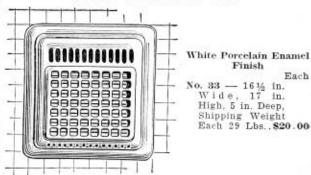
Hangs like a picture on any wall in any room where a nail or screw can be driven. It is designed for use in bedrooms, bathrooms, halls or wherever floor space is limited. It radiates instant, comfortable and satisfying warmth wherever and whenever it is wanted.

May be attached permanently or used as a portable and carried easily from room to room. It is designed with ample air space to give safe insulation against overheating of the wall where it is hung.

The Reznor Yellow Flame Burner converts all gas into heat. There is no odor, no carbon monoxide or danger from "lighting back."

One in a Crate.

#### REZNOR WALL-INSERT TYPE



Designed for use in bedrooms and bathrooms where floor space is limited. It can be placed in any wall which has a depth of four inches or more and is guaranteed to

Finish

Each

To reduce weight, wall strain and breakage, the front of the heater is made of 18 gauge deep drawing enameling steel which takes a beautiful finish. Valve is so arranged that the maximum flow of gas can be regulated, and when turned on full, the flame cannot extend beyond the front.

One in a Crate.

#### REZNOR GLOWARM PORTABLE

be absolutely safe.





Top, Front and Sides are made of a specially selected Rust-resisting 26 Gauge Sheet Iron. Flame Plate and Back are made of .24 and 26 Gauge Refined Iron. Corner Pieces and Legs are of very heavy Stamping Stock. The Reflector is made intirely of solid 10 ounce Copper. Aluminum Burner Tips cannot come out. made so maximum flow of gas can be regulated to prevent flame from extending beyond front of heater. Guard is 18 Gauge Black Japanned Expanded Metal. Three inch full connection on all sizes except No. 110.

Nos	110	121	142	153	164	175	126	137
Height, In		19	21 34	21 %	23	23 36	24	2634
Width, In		12	14	18 1/2	21	23	3.0	34 1/2
Depth, In		9 14	9 1/2	9 1/2	9 1/2	9 %	11	12
Shipping Wt.								
Each, Lbs		834	111/2	14	1.5	1.7	22	3.0
Each	\$4.00	5.00	6.00	7.50	9.00	10.50	12.00	15.00
			0	and the same				

One in a Crate.

## GAS HEATERS

#### REZNOR GLOWARM PORTABLE

For Natural or Manufactured Gas



Sheet Metal, Black Baked Japan, Nickel Plated Corner Pieces and Legs

Body of heater is all electrically welded together. The legs are heavy stamping steel bolted to body through corners.

Valve is arranged so maximum flow of gas can be regulated.

3 in, flue connection in all sizes.

•			
Nos	201	204	205
Height, Inches	16	16	18
Width, Inches	11	14	18
Depth, Inches		9 34	10
Shipping Weight Each, Lbs	7	8 1/2	11
Each	\$4.00	5.00	6.50
Nos	206	210	213
Height, Inches	18	20	20
Width, Inches	22	25 1/2	30
Depth. Inches	10 %	10%	11
Shipping Weight Each, Lbs	13 1/2	18	20
Each	\$8.00	9.50	11.00
			213

A plain and inexpensive but a thoroughly efficient and excellent appliance in every way.

One in a Crate.

## REZNOR "FLICKER" PORTABLE For Natural or Manufactured Gas

#### Best Grade Blued Steel, Nickel Plated Legs

Has a rat-tail burner, with 14 aluminum tips. Burns a yellow flame, full protected by heavy guard in front. Baffle plate directs flame toward rear near top. A double back, forming large air space between flame and back of heater. This prevents overheating of back and increases hot air circulation.



No. 0—15 in. High. 13 in. Wide, 5 in. Deep, Weight Per Carton 28 Lbs......\$2.50 Six in a Carton.

## GAS STOVE CONNECTIONS

"SAFETY FIRST"

Lead Pipe with Brass Union and Bushing

36 inch Male Thread on Bushing End., 14 inch Male and 16 inch Female Thread on Union End.

Can be bent to any shape. Make a safe and convenient connection.

Open Stock.

## GAS HEATERS

#### REZNOR PORTABLE GARAGE

For Natural or Manufactured Gas



#### Heavy Sheet Iron, Black Baked Japan

Burns a yellow flame, and having no mixer is free from the danger of lighting back.

Can be used with perfect safety without a flue connection, although one is provided.

Has no pilot or other complicated lighting arrangement to get out of order.

Has a larger heating capacity for its size than any heater made. It is 100 per cent efficient.

Nos	27	35
Height, Inches	271/2	28 1/2
Length, Inches	26	32 1/2
Depth, Inches	9 1/2	9 1/2
Shipping Weight Each, Lbs	35	4.6
Each	\$18.00	21.00

These heaters are designed for use in automobile garages, but are especially well adapted for use in public buildings where space is first consideration. The above two heaters will heat up to 4700 and 7500 cubic feet of air space respectively. They can be placed close to the wall and a car run within three inches of the heater without danger of scorching.

One in a Crate.

## GAS TUBING

#### AMERICAN FLEXIBLE STEEL

In the manufacture of this Tubing, Quality is the first consideration. Rubber Tubing deteriorates with age and becomes leaky, American Flexible Steel Tubing is the safest and most durable Gas Tubing on the market.



## in. I. D., Rubber Ends Attached

Length, Feet	3	4	5	6
Weight Per Length, Lbs	.31	.38	. 45	. 52
Per Length	80.25	.30	.35	.40

Open Stock,

#### RUBBER



First Quality Red Rubber, Cloth Inserted, 3 Ply

Diameter, 1	nches		 	4			*	. ,			-	4		c	36
Weight Per	Box,	Lbs													6 1/2
Per Foot .			 				,		4						\$0.08

50 Feet in a Box.

## OIL COOK STOVES

#### PERFECTION

The most popular and largest selling line of all stoves on the market and without question the greatest value. The Perfection Burner-Scientific in construction, giving ease

of operation, a clean, quick heating flame, durability and dependability.

Chimney-New "Cobalt Blue", a permanent, tough, lustrous, vitreous enamel, does not easily chip, or craze, nor readily show stain.

Straight-Leg Frame-Similar in strength and beauty of design to the higher priced stoves.

Square Grates-Provide greater cooking space for pots and pans and increase cooking speed by allowing a larger volume of heat to reach the cooking.

Cooking Top-Roomy and at most comfortable height from the floor.

New Base Shelf-Stiffens the stove and furnishes a handy, out of the way place for utensils.

Built-In Tray-Beneath burners, "rounded out" for ease in cleaning.



No. 73.

Black Japanned Heavy Pressed Steel Frame, Legs and Lower Base Shelf, Without Warming Cabinet Each

No. 72—2 Burners, 24 1/8 x17 in. Cooking Top., 32 1/8 in. Long Over All, 17 in. Deep Over All, 32 in, High Over All, Weight Each Crated 45 .....\$26.25

One in a Crate.

Each No. 73—3 Burners, 34%x17 in. Cooking Top, 42% in. Long Over All, 17 in. Deep Over All, 32 in. High Over All, Weight Each Crated 55½ Lbs. . . . . . . . . . . . One in a Crate.

#### WARMING CABINETS ONLY

Black Japanned, Nickel Plated Trimmings

No. 72-JWC-For No. 72 Stove, 241/4 in. Long Over

All, 10 1/8 in. Deep, 24 1/8 in. High, Weight Each Crated 17 Lbs.

No. 73-JWC-For No. 73 Stove, 34 % in. Long Over All, 10 1/8 in. Deep, 24 1/8 in. High, Weight Each . . . . . . . . . . . . . 9 . 75 Crated 22 Lbs.. One in a Crate.

White Porcelain Enameled Splasher, Black Japanned Ends and Top, with Nickel Plated Trimmings Each

No. 73-EWC-For No. 73 Stove, 34 % in. Long Over All, 10 % in. Deep, 24 % in. High, Weight Each 

One in a Crate.

No. 1525.

No. 72.

OIL HEATERS

#### PERFECTION

Clean, odorless and economical. Radiate heat in all directions, spreading warmth to all corners. Burn 10 hours on one gallon of kerosene.

New Gravity Catch-Positive in action with exclusive double safety feature; operates similarly to the door of an enclosed automobile. Supplies a convenient handle with which to tip back drum, and improves appearance of the heater.

Inner Wick Tube-Lock-seamed and soldered to reservoir body and cannot possibly leak, even if overheated.

Filler Cap Hinge-Improved, insuring an accurate and tight fitting cap.

Floor Tray-Black japanned, lifts with heater.

Oil Indicator-Cannot be fastened in place incorrectly. Patent Wick Guide-Keeps the lower portion of the wick sub-

merged in the oil. The wick will use the last drop of oil in the fount. This is a feature exclusive with the Perfection Oil Heaters.

Each



No. 1530.

and Trimmings, Lead Coated Steel Reservoir Each

One in a Crate.

## OIL COOK STOVE WICKS

PERFECTION

With Metal Carrier

No. 331-For Perfection Oil Cook Stoves, Highest Quality Cotton, Ready to Light, Wt. Each About 11/4 Lbs. \$0.50

One in a Craton, Twelve in a Box.

Polished Steel Upper Drum, Black Japanned Lower Drum | Polished Steel Upper Drum, Black Japanned Lower Drum, Nickel Plated Trimmings, Lead Coated Steel Reservoir

> One in a Crate.

## OIL HEATER WICKS



PERFECTION

With Metal Carrier

Each

No. 500-For All Perfection Oil Heaters, Highest Quality Cotton, Ready to Light, Weight Each 

One in a Carton, Twelve in a Box.



## GASOLINE LAMPS

"NULITE" PORTABLE

Light with a Match, No Other Generating Required



Brass, Nickel Plated

Each

No. 110-M-400 Candle Power, Capacity of Fount 3 Pints, Burns About 18 Hours on One Filling, 22 in. High Over All, Equipped Complete with a 10 in. Diameter Fancy Embossed White Shade, Two Rag Mantles, Straight Removable Generator, Wrench, Pump, Tip Cleaner, Extra Rubber Washer and Full Instructions, Weight Each Complete About 10 Lbs. \$15.35

Make their own gas from gasoline and give a bright, white, steady light of 400 candle power. They are safe in any position, no danger if upset. Can't spill fuel or explode. No wicks to trim-no chimneys to clean. Always clean, neat and attractive in appearance.

By test, they give stronger light, a greater quantity and more efficient, effective illumination of better quality at the least cost.

One in a Box.

## GASOLINE LANTERNS

"NULITE STORM PROOF"

Light with a Match, No Other Generating Required

Brass, Nickel Plated, Mica Chimney with Built-In Pump

No. 3-M-400 Candle Power, Ca-3-M—400 Candle Power, Capacity of Fount 1 Quart, Burns 12 to 14 Hours on One Filling, 13 in. High Over All, Equipped Complete with Two Rag Man-tles, Straight Removable Generator, Wrench, Tip Cleaner, Extra Rubber Washer and Full Instructions, Weight Each Complete About 6 Lbs......\$15.00



Built to withstand the hardest use under the most trying weather con-ditions. Unaffected by high wind, rain, snow or sleet, it can be carried right through the fiercest storm.

In use everywhere by farmers, campers, builders, plumbers, watchmen, auto tourists, etc.

One in a Box.

## MANTLES

"NULITE"

Best Grade Fabrics and Chemicals

No 1-B-Small High Power Mantle for No. 110-M Lamp and No. 3-M Lantern, Reinforced Shadowless Bottom, Wt. Dozen 11/2 Oz. .....\$2.00

One Dozen in a Box, One Dozen Boxes in a Counter Display Carton.

## LANTERNS

DIETZ COLD BLAST

Special Features-Dietz Security Standing Bail, Patent Brass Eyelets, Patent Safety Burner, Patent Positive Locking Globe Lift, Large Oil Filler with Wired Filler Cap and Double Seamed Solderless Dome Shape Oil Fount. Where Needed to Protect the Lift Mechanism from Strain, these Lanterns have Specially Braced Lift Guides.

#### "BLIZZARD"

Bright Tin, with "Blizzard Fitzall Loc-Nob" Globe

Gives a Light of 10 Candle Power, Wing-Lock Cone Burner, 1 in. Wick. Per Dozen

No. 2-Plain Globe, 14 % in. High, Burns 20 Hours on One Filling, Shipping Weight Per Dozen 38 Lbs.........\$20.00

No. 2-R-Ruby Glove, Otherwise Same as No. 2...... 23.10

Signify the best to be had in large size lanterns of the High-Globe, Cold Blast Type.

The "Loc-Nob" positively prevents the globe from slipping out of the retaining guard when tipped back.

One-half Dozen in a Case.

#### "D-LITE"

Bright Tin, with Short "D-Lite Loc-Nob" Globe

Gives a Light of 10 Candle Power, Wing-Lock Cone Burner, 1 in. Wick. Per Dozen

No. 2-D-Plain Globe, 13 1/4 in. High, Burns 20 Hours on One Filling, Shipping Weight Per Dozen 37 Lbs.....\$20.00

No. 2-DR-Ruby Globe, Otherwise Same as No. 2-D..... 23.10

In height, "D-Lite" Lanterns are no greater than common Hot Blast Lanterns, yet give almost three times the

One-half Dozen in a Case.



#### "LITTLE WIZARD"



Bright Tin, with Short "Little Wizard Loc-Nob" Globe

Gives a light of 6 Candle Power, Wing-Lock Cone Burner, % in. Wick.

Per Dozen No. LW-Plain Globe, 11 1/2 in. High. Burns 20 Hours on One Filling.

Shipping Weight Per Dozen 24 No. LWR—Ruby Globe, Otherwise 

Same as No. LW ..... 16.60 The little lantern with the big light. Popular with Boy Scouts, Campers, Hikers, Contractors, etc.

One Dozen in a Case,

#### "JUNIOR"

Bright Tin, with "Junior Loc-Nob" Globe

Gives a Light of 6 Candle Power, Wing-Lock Cone Burner, % in, Wick, Plain Globe.

Per Dozen Junior-12 in. High, Burns Hours on One Filling, Shipping Weight Per Dozen 24 Lbs....\$13.50

Combines minimum weight and bulk with maximum lighting power.

One Dozen in a Carton.





## LANTERNS

#### DIETZ HOT BLAST

Special Features-Dietz Standing Bail, Patent Brass Eyelets, Patent Safety Burner, Patented Positive-Locking Globe Lift, Large Oil Filler with Non-Loseable Cap and Double Seamed, Solderless Oil Fount.



#### "HY-LO"

These lanterns are in great demand wherever public works, railroads, sewers, dams, etc., are under construction and for general use on the farm. The simple globe lift construction and low price make them thoroughly capable for the work.

#### Bright Tin, with "Fitzall Loc-Knob" Globe

Gives a Light of 4 Candle Power, Patented Steel Hinged Cone Burner, 5% in. Wick.

Hy-Lo-Plain Globe, 13 1/2 in. High, Burns 20 Hours on One Filling, Shipping Weight Per Dozen 

Hy-Lo-R-Ruby Globe, Otherwise Same as Above. . 15.60 One Dozen in a Case.

## WAGON LANTERNS

DIETZ "JUNIOR" COLD BLAST

Heavy Tin, Black Enameled, with Plain "Junior Loc-Nob" Globe

Gives a Reflected Light of 10 Candle Power, Wing-Lock Cone Burner, 5% in. Wick.

Per Dozen

Junior-12 in, High, Burns 13 Hours on One Filling, 21/4 in. Ruby Rear Lens, 21/4 in. Magnifying Bulls-Eye Lens, Shipping Weight Per Dozen 42 Lbs. .....\$27.00

Complies with all Night Driving Laws. A combination holder permits use of a flat or round bracket. Packed regularly with flat bracket and furnished with clip spring holder as illustrated in addition to combination socket.

One-half Dozen in a Case.

## PARKING AND DRIVING LANTERNS

DIETZ "EUREKA"

Cold Rolled Steel, Black Enameled, Nickel Plated Door Rim, Wing-Lock Cone Burner, % in. Wick

Per Dozen

Eureka-714 in. High, Burns 10 Hours on One Filling, 2 ¼ in. Ruby Rear Lens, 3 ¼ in. Plain Door Lens, Shipping Weight Per Dozen 25 .....\$27.00

Ideal for any kind of vehicle, and complies with all Night Driving Laws. The smallest practical vehicle light made. Also used as an automobile parking lamp.

A bail permits the use of the "Eureka" as a hand lantern.

Packed with Style "A" Holder as illustrated. One Dozen in a Case.

## RAILROAD LANTERNS

DIETZ "STANDARD"



For Signal Oil

Bright Tinned Steel, gives a Light of 2 Candle Power, Extra Special Screw Ratchet Burner, 1 in. Wick, Plain Heat Resisting "Vulcan" Globe.

No. 39-10 in. High, Burns 24 Hours on One Filling, Shipping Weight Per Dozen 43 

Made with a solid metal bell bottom and inside oil pot, which cannot drop out. Substantial round wire guard protects the globe. Globe and loose oil pot lift in and out when the top of the lantern is turned back on its hinge. Outside wick raiser.

A well balanced dependable signaling lantern.

One Dozen in a Case.

## GASOLINE WALL TORCHES

LINDEMAN ANCHOR

Japanned Leaded Steel Plate Tank, Brass Globe Valve and Generating Burner, Malleable Iron Safety Hanger

Per Dozen

No. 1-Single Burner, Capacity of Tank 1 Gallon, Weight Per Dozen 50 Lbs.....\$30.00

These Torches are extensively used and unequalled for lighting public meeting places, camping and picnic grounds, tents, dance halls, factories, warehouses, mining, lumber and contractor's camps, etc.

They are widely used by showmen, Street Fakirs, Auctioneers, Fishermen,

Simple in operation, easily kept clean, latest and highest improved construction.

Open Stock.



## PYRAMID MILL TORCHES

WALL "EVERLASTING"

Brazed Steel

Made from Heavy Steel. A stout, durable, desirable Torch that will outlast twenty made of galvanized iron.

For Factories, Foundries, Rolling Mills, Blast Furnaces, Construction Work, etc.

83 85 2 1 1/2 1 9 No. of Burners... 1 1114 Weight Dozen, Lbs. 16 16 18 21 25 16 Per Dozen ..... \$9.00 10.00 12.00 12.00 14.00

Open Stock.

## TORCH WICKS

For Pyramid Mill Torches

Per Pound

Torch Wicks-5% in. Diameter Braided Cotton . . . . . \$1.00

Twenty-five Yards in a Coil.





Style "A Holder

## MINERS LAMPS

JUSTRITE MINERS CAP



Wire Feed, Round Hook, with Lighter Attachment

2 1/4 in Diameter, Concaved Reflector, Burns 21/2 Hours on One 2 oz. Charge of Carbide and Gives a Light of 16.7 Candle Power. Net Weight Each 5 oz.

Drawn Brass, Polished

Per Dozen

-3 % in. High, 2 in. Diameter Bottom, with No. 77 Carbide Can, Weight Per Dozen 6 Lbs. . \$15.00

One Dozen in a Carton.

#### Polygon Feed, Round Hook, with Lighter Attachment

2 1/4 in. Diameter, Concaved Reflector, Burns 21/2 Hours on One 2 oz. Charge of Carbide and Gives a Light of 16.7 Candle Power. Net Weight Each 5 oz.



No. 704-334 in. High, 2 in. Diameter Bottom. with No. 77 Carbide Can, Weight Per Dozen 6 Lbs. . \$13.80

One Dozen in a Carton.

#### JUSTRITE SUPERINTENDENTS



Wire Feed, Double Wire Handle, with Lighter Attachment and Flame Protector

2 % in. Diameter Deep Concaved Reflector, Burns 21/2 Hours on One 2 oz, Charge of Carbide. Net Weight Each 6 oz.

> Drawn Brass, Nickel Plated Per Dozen

No. 100-3% in. High, 2 in. Diameter Bottom, with No. 77 Carbide Can, Wt. Per Dozen 6 1/2 Lbs. . \$18.00

One-half Dozen in a Carton.

#### POCKET CARBIDE CANS

Furnished with No. 85, 704 and 100 Lamps Tinned Steel, Ribbed

No. 77-Capacity 10 Oz., Double Seamed, Sliding Cover, Concaved to Fit Boot or Hip Pocket. Holds a Full Day's Supply. Will Not Rust. \$1.80



## PLUMBERS CANDLES



For Shop or Plumbers Use

Per Set 

## LANTERN GLOBES

Dietz Loc-Nob on globes prevents globe from falling off wires when tilted back. In the short globes the hand may easily be inserted for cleaning.

#### BLIZZARD FITZALL LOC-NOB



For "No. 2 Blizzard" and "Hylo" Lanterns Per Dozen

No. BFL—Plain, 6 % in. High, 2 % in. Diameter Top, 3 % in. Diameter Bottom, Weight Per Dozen Packed About 15 Lbs.....\$2.00 No. BFLR-Ruby, Otherwise Same

as No. BFL..... 5.10

#### D-LITE LOC-NOB

For "D-Lite" Lanterns

Per Dozen No. DL—Plain, 4 % in. High, 4 ½ in. Diameter Top. 3 ¼ in. Diameter Bottom, Weight Per Dozen Packed About 13 Lbs.....\$2.00

No. DLR-Ruby, Otherwise Same as No. DL ...... 5.10



#### LITTLE WIZARD LOC-NOB



Per Dozen No. LW-Plain, 313 in. High, 314 in. Diameter Top, 218 in. Diameter Bottom, Wt. Per Dozen Packed About 8 Lbs.

For "Little Wizard" Lanterns

No. LWR-Ruby, Otherwise Same as No. LW ..... 4.90

#### JUNIOR LOC-NOB

For "Junior" and "Junior Wagon" Lanterns Per Dozen

No. J-Plain, 5 1/2 in. High, 2 3/4 in. Diameter Top, 218 in. Diameter Bottom, Weight Per Dozen Packed About 10 Lbs.....\$1.80 No. JR-Ruby, Otherwise Same as

No. J ..... 4.90

#### VULCAN RAILROAD



Heat Resisting, for "Standard" Railroad Lanterns Per Dozen

No. 39—Plain, 5 % in. High, 2 ½ in. Diameter Top. 3 ¼ in. Diameter Bottom, Weight Per Dozen Packed About 15 Lbs.......\$2.40

No. 39-R-Ruby, Otherwise Same as No. 39 ..... 5.90

## LAMP OR LANTERN WICKS

Flat For All Ordinary





5% 1 Length, Inches ..... 8 8 Weight Per Gross, Lbs..... 1 14 % Per Gross .... \$2.00 3.00 One Gross in a Package.

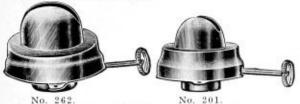


## CANDLE WICKING

Candle Wicking—Cotton, in 2 Oz.
Balls\$0.80
Five Pounds in a Bag.

## LANTERN BURNERS

Dietz Tinned Steel Burners do not break down, are cooler than Brass Burners, give a White Flame and last during the life of the lantern.

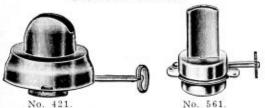


For "Blizzard" and "D-Lite" Cold Blast Lanterns

No. 262-Tinned Steel, Wing-Lock Cone, Takes 1 in.

Wick, Weight Per Dozen About 2 Lbs.......\$1.60 For "Little Wizard," "Junior" and "Junior Wagon" Cold Blast Lanterns Per Dozen

No. 201-Tinned Steel, Wing-Lock Cone, Takes % in. Wick, Weight Per Dozen About 2 Lbs......\$1.10
One Dozen in a Box.



For "Eureka" Driving and Parking Lanterns Per Dozen No. 561-Tinned Steel, Wing-Lock Cone, Takes % in. Wick, Weight Per Dozen About 2 Lbs.......\$1.35 One Dozen in a Box.



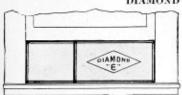
For "Standard" Railroad Lanterns

Per Dozen

No. 1—Extra Special Ratchet, Brass, for Signal Oil, Takes 1 in. Wick, Wt. Per Dozen About 2 

One Dozen in a Box.

### WINDOW VENTILATORS DIAMOND "E"



Will not rust, corrode, break, split, warp or fall apart and the two sliding parts are easily adjustable.

Lets in clean, pure, fresh air and keeps out coal soot, dirt, dust, rain and snow.

A necessity in all homes and institutions. Linen Colored Cloth of Fine Quality and Strength.

Black Enamele	d All Met	tal Fran	ie	
Nos	01	02	03	1
Height, Inches	8	8	8	11
Width Open, Inches		39	47	3.0
Width Closed, Inches		20	24	16
Weight Each, Lbs		1 1/4	1 1/2	1 1/4
Each		. 65	. 75	.70
Nos	2	3	4	5
Height, Inches	11	11	16	1.6
Width Open, Inches	39	4.7	39	4.7
Width Closed, Inches	20	24	20	24
Weight Each, Lbs	1 1/2	1 34	1 %	2
Each		.85	1.00	1.10
One Dozen		arton.		

## LASTS AND STANDS

GUARANTEED PERFECTION



Semi-Steel, Black Japanned

Made from a special metal of highest quality, producing sets better in weight and strength than anything on the market.

Have the correct weight to prevent the lasts from bouncing around on the stand when struck.

Absolutely guaranteed against breakage and any claims for breakage will be replaced.

Per Dozen

Per Dozen

Reversible, Two Positions, Horizontal and Upright

No. 50-G-Stand 24 in. High, Four Round Toe Lasts, 10 1/2, 9, 7 1/4 and 6 in. Long, Weight Per Set About 15 Lbs......\$2.00

No. 52-G-Stand 15 in. High, Four Round Toe Lasts, 10 1/2, 9, 7 1/4 and 6 in. Long, Weight Per Set About 12 Lbs.,.... 1.50 Open Stock.

## STEEL GAME TRAPS

#### VICTOR

Well made, light in construction. Crucible steel springs have just the right strength and elasticity, are of superior quality and temper.

Jaws are made of rolled steel to give them great strength and lightness.

All are provided with steel wire chain, ring and staple. Each pan is pierced with a "V" to identify the genuine "Victor".



Single Spring, with Chain

No.	0-V -For	Rats, Gophers, Weasels, Etc \$2.00
		Muskrat, Skunk, Opossum, Etc 2.25
		Mink, Skunk, Raccoon, Muskrat, Etc. 4.00
		Specifications

Nos	0-V	1-V	1 1/2 - V
Spread of Jaws, Inches	3 1/2	4	4.5%
Length of Trap, Inches	6 78	8 1/8	9 %
Weight Per Dozen, Lbs		7 3/2	111/2
Dozen in a Barrel	5.5	4.0	2.5



Double Spring, with Chain

No. 2-V-For Fox, Raccoon, Fisher, Etc	.\$5.50
Specifications	199221
No	2-V
Spread of Jaws, Inches	4 %
Length of Trap, Inches	14%
Weight Per Dozen, Lbs	13%
Dozen in a Barrel	15

# MOUSE TRAPS



ROUND WOOD CHOKER

Stained Bright Red, Coppered Steel Wire Springs Per Dozen

-Four Holes, Weight Per Dozen 5 Lbs......\$1.50 One Dozen in a Bundle.

#### VICTOR



Metal Trigger

Selected Hardwood Base, Coppered Tempered Steel Wire Spring.

Per Dozen

No. VM-3 % x2x 1/4 in. Base, Weight Per Dozen 1 Lb....\$0.60

The Bait Trigger is designed to make catching sure every time. The spring is fastened with clinched staples that will not pull out. One Dozen in a Carton.

#### HOLD 'EM



Spring Steel Wire, Lacquered Per Dozen

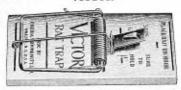
No. 00—9 in. Long, 4½ in. Wide, Double Metal Ribs Safety Door, Weight Per Dozen 8 Lbs......\$7.50

The door opens and closes from the top, and is perfectly secure when locked, which is an advantage when killing the mice with a dog.

No need of drowning the mice and rusting the trap.

One Dozen in a Carton.

## RAT TRAPS VICTOR



Metal Trigger

Selected Hardwood Base, Coppered Tempered Steel Wire Spring.

No. VR-7x3 1/2 x 1/2 in. Base, Weight Per Dozen 6 Lbs. . \$1.50

PerDozen

The overhanging bow is designed to strike quickly and hold tightly. Has short bait trigger-the rat is always caught well back on the body and has no chance to escape.

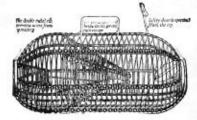
The heavy powerful spring is tightened with clinched staples that will

not pull out.

One Dozen in a Carton.

## RAT TRAPS

HOLD 'EM



Spring Steel Wire, Lacquered Double Metal Ribs, Extension Bottom, Safety Door.

No. 1—16 in. Long, 9 in. Wide, 7 in. High, Weight Per Dozen 28 Lbs......\$12.00

No need of drowning the rats and rusting the trap. The door opens and closes from the top and is perfectly secure when locked, which is an advantage when killing the rats with a dog. Cannot get broken or displaced.

One-half Dozen in a Carton.

## ALARM TILLS TUCKER



Improved Lock, 32 Changes

Quartered Oak Front, Drawer Dovetailed, Rounded Edges, Varnished and Polished, Wax Finish. Each

No. 501 - 4 % x18 ¼ x16 ¼ in. Over All, Four Bill Spaces 3 % x8 in., Two Bowls for Gold, Groove for Pencils, etc., Four Round Bowls 3 1/2 in. Diameter, Two Oblong Bowls 3 1/2 x5 in., Wt. 

One in a Carton, Six in a Crate.



Improved Lock, 32 Changes Oak Front, Drawer Gained, Front, Interior and Tray Varnished.

Each No. 503 — 4 % x18 % x16 % in. Over All, Four Bill Spaces 3 % x8 in., Two Bowls for Gold, Groove for Pencils, etc., Four Round Bowls 3 1/2 in. Diameter, Two Oblong Bowls 3½x5 in., Weight Each 14 Lbs.........\$6.00

One in a Carton, Six in a Crate,

## ALARM TILLS TUCKER



Improved Lock, 32 Changes Oak Front, Drawer Gained, Front Varnished, Interior and Tray Stained, fitted with a Silver-tone Cathedral Gong that Rings Each Time Finger Keys are Pulled. Each

No. 504-4 1/2 x18 1/4 x15 in. Over All, Three Bill Spaces 3 % x 7 % in., Two Bowls for Halves and Dollars, Four Round Bowls 31/4 in. Diameter, Coin Tray Slides Side-One in a Carton, Six in a Crate.

## BASIN PLUGS



White Rubber, Nickel Plated Brass Trimmings

Size, Inches. . . 1 136 Wt. Doz., Lbs. 3/2 5/8 Per Dozen....\$0.80 .90 1.00 1.20 One Dozen in a Box.

## TANK BALLS



Extra Quality White Rubber Hard Reinforced Top and Soft Bottom. Size, Inches.... 2 234 3 Wt. Dozen, Lbs.. 1 1 2 1/2 Per Dozen..... \$3.00 3.50 3 1/2 4.00 One Dozen in a Box

## TANK BALL STEMS

Brass Wire Per Dozen No. 02-Lower Lift, 4% in. Long, Threaded to Fit Tank 

## COMPRESSION BIBBS

PLAIN



HOSE



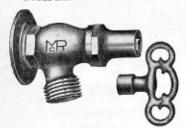
## LEVER HANDLE BIBBS



Polished Brass, Tinned Shank, for Lead Pipe

Nos	231	232	233
Inches	%	1/2	5%
Wt. Dozan, Lbs.	8 1/2	11	12 1/2
Per Dozen	\$26.40	27.00	37.20
Nos			235
Inches		3/4	1
Wt. Dozen, Lbs.		16 1/2	29
Per Dozen		\$47.40	68.40
One-half Do	zen in :	a Carto	n.

## SILL COCKS COMPRESSION PATTERN



Brass, Nickel Plated, Loose Key Rough Body, Semi-Finished Trimmings, Large Waterway.

 Size, Inches
 1/2
 34

 Wt. Carton, Lbs
 6 ½
 7

 Per Dozen
 \$34.80
 34.80

 One-half Dozen in a Carton.

## PETROLEUM FAUCETS

FRARY



Japanned Iron, Brass Key, Lever Handle, Screw Shank, for Wood

	ore,	SCF	ew.	101	ma	LI.	H.	TOP WO	1000
Nos.								14	5
Inch	es .						900	1/2	78
Wt.	Doze	en. l	Lbs			,		7.34	10 %
Per	Doze	n .				,	. !	\$11.00	13.00
Nos.					. v	ļ.		6	7
								34	1
Wt.	Doze	en, l	bs					17	23
Per	Doze	n .					. :	816.00	23.00
								a Cart	

# LOCK OIL BIBBS



For Steel Oil Barrels and Drums

When closed lever drops over loop on Bibb allowing it to be padlocked.

Cast Brass, Rough Finish Per Dozen

No. E-11001—% in., Lock
Lever Handle, Threaded
Shank, for Iron Pipe or
Tanks, Weight Per Dozen
About 16 Lbs......\$36.00
One-half Dozen in a Carton.

# LIQUOR FAUCETS McKENNA BURGLAR PROOF



Brass, Nickel Plated, Loose Key, to Screw

Size Shank,	Inches.			76
Weight Per	Dozen,	Lbs		12
Per Dozen .				\$25.00
The "shut	-off" is	inside	the	barrel.

The "shut-off" is inside the barrel, therefore not a drop of liquor can remain in the body of the faucet. Has German Silver Strainer Cap. One Dozen in a Box.



Polished Brass, to Screw

Per Dozen

## RACKING COCKS



Polished Brass, Loose Key, to Screw

Per Dozen

No. 43—¾ in., Weight Dozen 14 Lbs. . . . . . . . . . . . . . \$31.00 One-half Dozen in a Carton.

## RACKING COCKS



 Finished Brass, Loose Key, to Screw

 Nos.
 640
 641
 642

 Inches
 36
 1½
 %

 Wt. Dozen, Lbs.
 7
 9
 12

 Per Dozen
 \$14.50
 18.00
 23.50

Nos. 640 and 641, One Dozen; No. 642, One-half Dozen in a Carton.

## OIL AND MOLASSES GATES

STEARNS PERFECTION PATTERN



Japanned Iron

Style A—Tapered Screw Shank, Wood Thread

Inside Dia., In. ½ ¾ 1 Wt. Dozen, Lbs. 15 18 24 Per Dozen . . . . \$15.00 15.50 16.00

Inside Dia., In. 1¼ 1½ 2 Wt. Dozen, Lbs. 30 44 55 Per Dozen . . . . \$18.50 22.00 30.00

Style E—Straight Screw Shank, Iron Pipe Thread

Inside Dia., In. 34 1 134 Wt. Dozen, Lbs. 17 23 29 Per Dozen . . . . \$17.00 17.60 20.35

 Inside Dia., In.
 1½
 2

 Wt. Dozen, Lbs.
 38
 49

 Per Dozen
 \$24,20,33.00

Will hold the thickest of syrups, varnishes, etc., to the thinnest of fluids like benzine, naptha, etc. One-half Dozen in a Box.

STEBBINS PATTERN



Japanned Iron, Polished Face and Cut-Off, Tapered Screw Shank for Wood

### WOOD FAUCETS



Cedar, Unlined, Wood Key

Per Dozen No. 2-8 in. Long. Weight Per Dozen 5 Lbs.....\$2.00 One Dozen in a Box.

### PEERLESS Polished Maple Body, Leather

Lined, Block Tin Key The Block Tin Key will not corrode, nor will it contaminate

the liquor 8 5 1/2 Per Dozen ...... \$3.50 4.00 One Dozen in a Box.



EAGLE

Maple Wood Body, Leather Lined, Wood Lined Metal Key

7 1/6

4.50

Per Dozen No. 1 - 9 in. Long. Weight Per Dozen 6 Lbs. . . . . . . \$4.50 Open Stock,

#### DIAMOND LOCK

Highly Polished Maple Wood Body, Best Block Tin Trimmings, Loose Key

Length, Inches... 7 8
Wt. Dozen, Lbs... 10 11
Per Dozen..... \$3.50 4.00 One Dozen in a Box.



## BUNG HOLE BORERS

IMPROVED ENTERPRISE



Graduated, Tempered Steel, Polished, Round Lip Bit, Wood Handle

1 23 1 1/8 to 2 Bores, Inches ...... 12 to 1 1/2 1 1/2 to 3 Weight Per Box, Lbs.... 20 38 35 Each .... \$4.00 5.50

Bores a complete round hole, regular taper, holds its own chips and prevents them from entering the cask. Nos. 1 and 2, Twelve; No. 3, Six in a Box.

#### BIBB WASHERS FIRER.



Glycerine Cured

Furnished in Both Gray and Red. Flexible for Cold Water. Size, Inches 350 280 240 165 No. in Lb. About..... \$1.00 1.25 1.50 1.75 Per 100 ...... Open Stock.

## WASTE PAPER BALERS

ALSTEEL

#### Compact, Durable and Efficient



Has an automatic lift for the presser head so that it is not necessary to wind it up with a crank, Has a double acting pressing mechanism so that pressure is obtained on both up and down strokes of the lever. It is the fastest hand baler on the market.

Makes a compact bale that will stand shipping. The wiring is done before the paper is put in the baler eliminating clogging of wire slots. All work is done from in front of the baler.

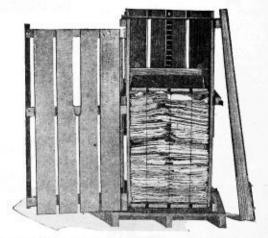
#### Heavy Shect Steel Body, Reinforced with Steel Angles, Battleship Gray Enameled

Nos	1	2
Size Bale, Inches		16x20x30-40
Weight Bale, Lbs	100	125-150
Height, Inches	69	78
Floor Space, Inches	20x22	22x24
Weight Each, Lbs	150	200
Each	\$50.00	60.00

When the feed door is closed, the Alsteel is absolutely Provides a safe storage for all loose combustible fireproof. waste. Eliminates risk, decreases fire hazard and lowers insurance rates.

One in a Crate.

GEM



Made of well seasoned hardwood, thoroughly bolted and screwed together. Steel and malleable iron metal parts.

Finished with Two Coats of Vermilion Enamel Paint

Gem-14x18x36 in. Bale, Bale Weighs 80 to 100 Lbs., Height of Baler Over All 4 ft. 3 in., Floor Space 23x26 in., Weight Each 135 Lbs......\$20.00

Pressure is obtained from Ratchet in Back of Baler, directly from Lever on Plunger, there being Side Ratchets to hold Plunger in position.

One in a Crate.

## VACUUM BOTTLES

"UNIVERSAL" UTILITY

With Extra Drinking Cups with Folding Handles Nested in Handled Outside Cover Cup



The Quart Size Bottles have Three Extra Cups and Outside Cup. Pint Size Bottles have Two Extra Cups and Outside Cup.

Pint Size Bottles have Two Extra Cups and Outside Cup.

All Extra Cups are of Aluminum, regardless of size or style of bottle.

These new Utility Vacuum Bottles with Extra Cups allow several persons to be served at the same time with entire regard for sanitary principles. This Multi-cup feature does not increase the size of the bottle nor destroy its symmetry.

The Extra Cups are safely carried in the Outside Cup. Keep Hot Liquids Hot 24 Hours, Cold Liquids Cold 72 Hours

Every Filler is first grade and high test regardless of price of bottle. Filler is supported in the Case by a Spring Shock Absorber and a Rubber Cushion.



Nos. 5111

and 5112

#### Heavy Steel Case, Dull Black Enameled

Aluminum Shoulder, Aluminum Outside Cup, Highly Polished Outside.

No. 5111-Pint, Weight Each No. 5112—Quart, Weight Each About 3 Lbs..... 2.35

One in a Carton, Twelve in a Case.



Nos. 571 and 572

Heavy Steel Case, Dark Green Enameled

Nickel Plated Brass Shoulder and Outside Cup, Inside of Cup is Silver Finished.

No. 571-Pint, Weight About 1 1/4 Lbs...........\$2.00 No. 572-Quart, Weight Each About 3 Lbs...... 3.00 One in a Carton, Twelve in a Case.

#### Extra Heavy Seamless Corrugated Brass Case, Full Nickel Plated

All Rust-Proof Construction, Outside Cup Silver Finished Inside.

No. 591-Pint, Weight Each About 134 .82.65 No. 592-Quart, Weight Each About 3 

One in a Carton, Twelve in a Case.



#### "COLUMBIA"

A genuine Vacuum Bottle, honestly made, representing excellent quality at a low price.

Equipped with genuine high grade Glass Filler, subjected to a 24 hour test, and effectively maintains hot or cold temperature. Standard Flat Metal Spring Support and Shock Absorber protect it against breakage.

Steel Case, Mahogany Red Enameled, Polished Aluminum Shoulder and Cup

No. 1011-Pint, Weight Each About 1% . . . . . . . . . . . 1.75 One in a Carton, Twelve in a Case.

#### EXTRA GLASS FILLERS

For "Universa	d Utility" and	l "Columbia"	Vacuum	Bottles Each
No. 00—Half No. 01—Pint.				
No. 02-Quar				
No. 00, One in	a Carton; Nos	s. 01 and 02, '	Twelve in	a Case.

## VACUUM BOTTLES

"STANLEY SUPER-VAC"

Non-Breakable

Guaranteed to retain temperature, not to break

and not to leak A newly developed process makes possible an

improved, efficient All Steel Bottle and permits the above triple guarantee.

The inner Steel Bottle is lined with "Amalite," giving a smooth, hard, perfectly sanitary surface. The first cost is the last cost and the expense

and annoyance of buying new parts eliminated.

Heavy Steel Case, Royal Blue Enameled, Nickel Plated Cup, Shoulder and Base

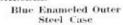
No. 703-Pint, Weight Per Case 17 Lbs. . \$7.00 No. 704-Quart, Weight Per Case 23 Lbs. 8.00 One in a Carton, Six in a Case.

#### VACUUM JUGS

STANLEY

CALLON JUG

STANLEY NON-BREAKABLE



Steel Inner Bottle Lined with Porcelain. Space between Inner Bottle and Outer Jacket has a Highly Insulated Filling.

Will keep foods or liquids not or cold all day.

Each No. 303 - Capacity 1 Gal., 14 4 x8 ½ in. Nickel Plated Screw Cap with 2 Aluminum Extra Cups, Nickel Silver Stopper, Wt. Each 9 Lbs..... \$7.50



## WORKMENS LUNCH KITS UNIVERSAL



Black Finish

Each

No. 310—10x5x7½ in., Heavy Tin Case, Complete with Pint Universal Vacum Bottle with Aluminum Shoulder and Drinking Cup with Folding Handles, Wt. Each 5 Lbs......\$2.85

One in a Carton, Six Cartons in a Case.

Black Finish

With Two Aluminum Trays for Carrying Pie, Pudding, etc. Each

No. 320—10x5x7½ in., Heavy Tin Case, Complete with Pint Universal Vacuum Bottle with Aluminum Shoulder and Drinking Cup with Folding Handles, Wt. 

One in a Carton, Six Cartons in a Case.

In the above Lunch Kits, a free circulation of air through a number of vent holes keeps the box sweet and the food within it fresh and wholesome. Catch holds drawer in place.

## ELECTRICAL APPLIANCES

"UNIVERSAL"

"Universal" Electrical Appliances have a distinction all their own and offer the best values obtainable in quality of materials, attractiveness of design, workmanship and service rendered.

The "Universal" Heating Element is finest quality non-oxidizing nichrome wire wound on India Mica insulated above and below with mica. Positively no possibility of a short circuit.

The "Universal" Safety Fuse Plug placed in all appliances designed to heat water or liquids prevents all possibility of an overheated element. It is simply an easily replaced Lead Fuse.

110 Volts are Standard, covering a range of 106 to 114 Volts,

#### "UNIVERSAL" ELECTRIC COFFEE URNS

Heavy Solid Copper Seamless Body, Nickel Plated, Inside Coated with Pure Tin, Silver Finished, Pure Aluminum Interior Fittings, Heat-proof Glass Top, Safety Fuse with 6 ft. Art Silk Heater Cord and Standard Attachment Plug.



#### LOVING CUP PATTERN

Ebonized Wood Handles, Faucet Handle and Feet, 400 Watts

Nos	E-9166-N	E-9169-N
Capacity, Cups	6	9
Height Over All, In	15 1/2	171/2
Wt. Ea. Packed, Lbs.	7 1/2	8 14
Each	\$22.50.	25.00

One in a Carton,

#### GRECIAN PATTERN

Swinging Cast Metal Handles, Ivoroy Faucet Handle and Feet, 420 Watts

No	E-9189-N
Capacity Cups	9
Height Over All, Inches	1334
Weight Each Packed, Lbs	7 1/2
Each	\$22.50

One in a Carton.





## ANTHENIAN PATTERN

Metal Handles, Ivoroy Faucet Handle, Feet and Knob, 420 Watts

No	E-01750.N
	E-91109-M
Capacity, Cups	9
Height Over All, Inches	141/2
Weight Each Packed, Lbs	8
Each	\$21.50

One in a Carton.

#### ROMAN PATTERN

Pendant Ivoroy Handles, Ivoroy Faucet Handle, Feet and Knob, 420 Watts

No	
Height Over All, Inches	121/2
Weight Each Packed, Lbs	\$18.75

One in a Carton.





#### DUTCH COLONIAL PATTERN

Ebonized Wood Handles, Ivoroy Faucet Handle, 420 Watts

Nos	E-9106-N	E-9109-N
Capacity, Cups	6	9
Hgt. Over All, In	14	143%
Wt. Ea. P'ked, Lbs.	5 %	6 %
Each	\$18.00	19.50

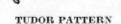
One in a Carton.

#### "UNIVERSAL" ELECTRIC COFFEE URNS EMPIRE PATTERN

Ebonized Wood Handles and Faucet Handle, 420 Watts

Nos	E-9176-N	E-9179-N
Capacity, Cups	6	9
Height Over All, In	141/4	15 1/2
Wt. Ea. Packed, Lbs.	6	6 %
Each	\$13.50	15.00

One in a Carton.



Ebonized Wood Handles and Faucet Handle, 420 Watts

No	E-9136-N
Capacity, Cups	6
Height Over All. Inches	14 1/2
Weight Each Packed, Lbs	5 1/2
Each	\$12.50
	The state of the s

One in a Carton.



#### UNIVERSAL COFFEE URN SETS GRECIAN PATTERN



Swinging Cast Metal Handle, Ivoroy Faucet Handle and Feet on Urn.

Complete with 6 ft. Art Silk Heater Cord and Standard Attachment Plug.

420 Watts.

Heavy Solid Seamless Copper Bodies, Nickel Plated
Per Set

No. E-918904-N Set—Consists of No. E-9189-N Urn, Capacity 9 Cups, No. 800-N Tray, 13x18 in., and No. 800-N Gold Lined Sugar Bowl and Cream Pitcher, Weight Per Set Packed 25 Lbs.. \$45.75 One Set in a Wooden Case.

#### LOVING CUP PATTERN

Ebonized Handles and Feet,

Complete with 6 ft. Art Silk Heater Cord and Standard Attachment Plug.

400 Watts.



Heavy Solid Scamless Copper Bodies, Nickel Plated
Per Set

No. E-916904-N Set—Consists of No. E-9169-N Urn, Capacity 9 Cups, No. 4400-N Tray, 12x18 in., and Nos. 440-N Gold Lined Sugar Bowl and Cream Pitcher, Weight Per Set Packed 24 Lbs . \$44.75

One Set in a Wooden Case.

## ELECTRICAL APPLIANCES

## "UNIVERSAL" ELECTRIC COFFEE PERCOLATORS

Pure Aluminum Interior Fittings, Ebonized Handles and Feet, Heat-Proof Glass Top, Safety Fuse Plug, Complete with 6 ft. Art Silk Heater Cord with Standard Attachment Plug and New Improved Connector Plug, 420 Watts.

## DUTCH COLONIAL PATTERN



Heavy Seamless Copper Body, Nickel Plated, Inside Coated with Pure Tin, Silver Finished

No	E-9606-N
Height Over All, Inches	10%
Weight Each Packed, Lbs	5
One in a Carton.	\$14.50

#### PLAIN PATTERN

Heavy Seamless Copper Body, Nickel Plated, Inside Coated with Pure Tin, Silver Finished



Nos	E-9635-N	E-9637-N	E-9639-N
Height Over All, Inches	9 3/2	10 1/4	11
Weight Each Packed, Lbs.	5	5 1/2	6
Each	810.00	11.00	12.50

One in a Carton.

#### CONTINENTAL PATTERN



Heavy Seamless Copper Body, Nickel Plated, Inside Coated with Pure Tin, Silver Finished

No	E-9876-N
Height Over All, Inches	10 1/2
Weight Each Packed, Lbs Each	\$10.00

One in a Carton.

#### ALUMINUM

#### Seamless, Aluminum Body, Highly Polished

No	E-9676
Capacity, Cups	6
Height Over All, Inches	10 %
Weight Each Packed, Lbs	3 1/4
Each	\$8.00

One in a Carton.



#### "THERMAX" ELECTRIC COFFEE PERCOIATORS



Pure Aluminum Scamless Spun Body

Aluminum Interior Fittings, Ebon-ized Handle and Feet, Heat Proof Glass Top Safety Fuse Plug, Complete with 6 ft. Heater Cord with Standard Attachment Plug and New Improved Connector Plug, 420 Watts.

Nos. Capacity, Cups	3926 6	2929 9
Height Over All, Inches	10	11
Weight Each Packed, Lbs	4 1/2	4 34
Each	87.50	9.00

One in a Carton.

## ELECTRICAL APPLIANCES

"UNIVERSAL" ELECTRIC BREAD TOASTERS



#### REVERSIBLE

The easy swinging Bread Holderopening like doors-reverse by a slight touch of the fingers and allow the bread to be quickly toasted on both sides without being touched by the fingers.

With Reversible Bread Holders, Nickel Plated, Cool Fibre Handles and Feet

Complete with 6 ft. Art Silk Heater Cord with Standard Attachment Plug and New Improved Connector Plug.

Nos	E-949-2
	500 550
Height Over All, Inches	7 734
Takes Slice of Bread, Inches 4	x4 1/2 5 1/2 x 4 1/4
Weight Each Packed, Lbs	3 3
Each \$	9.00 10.00

One in a Carton, Three in a Package,

#### OVEN

Toasts both sides from the largest loaf at one time. A handle pulls out the sliding rack which catches all crumbs and is easily emptied.





No. E-942-550 Watts, 7 in. High, Takes 4 1/2 x6 in. Slice of Bread, Complete with 6 ft. Art Slik Heater Cord, Push Button Switch, Standard At-One in a Carton, Three in a Package,

## STANDARD

Toasts large or small slices, two at e time. Ornamental bread holder one time. with strong spring keeps bread firmly in place insuring evenly browned toast.

Nickel Plated, Cool Fiber Handles and Feet.

No. E-948-T-550 Watts, 7 ¼ in. High, Takes 5 ½ x4 ½ in. Slice of Bread. Complete with 6 ft. Art Silk Heater Cord with Standard Attachment Plug and New Improved Connector Plug, Weight Each 

One in a Carton, Three in a Package.

#### "THERMAX" ELECTRIC BREAD TOASTERS

Full Nickel Plated Each No. 3946-500 Watts, 7 % in. High, Takes 41/2 x41/2 in, Slice of Bread, Complete with 6 ft. Heater Cord with Standard Attachment Plug and New Improved Connector Plug, Weight Each Packed 2 Lbs......\$3.75 One in a Carton, Three in a Package.



"THERMAX" ELECTRIC TOASTER STOVES



Will Toast, Broil, Fry and Stew

Has Kromore Wire Heating Element.

Full Nickel Plated Each No. 3982-550 Watts, 4 % x7 % in. Top, Complete with 6 ft. Heater Cord with Standard Attachment

Plug and New Improved Connector Plug, Weight One in a Carton.

## ELECTRICAL APPLIANCES

"UNIVERSAL DE LUXE" ELECTRIC WAFFLE IRONS



#### Exceptionally Efficient-Rapid in Operation—Beautiful Design

Makes four rich, thick, evenly browned waffles at one time.

The patented expansion hinge allows ample clearance for batter to "raise" a feature which every house-wife will appreciate.

#### Nickel Plated, Aluminum Grids, Cool Ebonized Handles, Fibre Feet

No. E-9314-660 Watts, 61/2 in. High Over All, 71/2 in. Diameter Grids, 9 ¼ in. Diameter Tray, Complete with 6 ft. Art Silk Heater Cord with Push Button Switch, Standard Attachment Plug and New Improved Connector Plug; Weight Each 

The Pure Aluminum Grids are designed so as to slightly overhang the body and prevent any batter from entering crevices difficult to clean. Heating unit is of the coil construction. Heats very quickly and conserves the heat.

Single Set Terminal makes Double Cord Unnecessary. The finely curved base serves as a tray and is very easy to clean. The ornamental perforations permit free circulation of air and keep the base cool.

One in a Carton, Three in a Package.

#### THREE HEAT SQUARE TABLE STOVES



Equipment

Deep Broiling Pan, for broiling, baking and roasting; 2 in. deep.

Inset Pan, for use as a chafer or double boiler; 2 in. deep.

Egg Poacher and Cups, provided with four feet to prevent

be easily lifted with a fork. cups from tipping, can Reflector Pan, to prevent heat radiation, also used as a frying pan

Cooking Cover, fits all pans, conserves heat and prevents the spattering of grease.

Broiler Grid, prevents meat from sticking to pans.

#### Nickel Plated Base and Frame, Pure Aluminum Pans and Cover

No. E-988-Three Heats, 160, 350 and 650 Watts, Three Heat Indicating Snap Switch, Cooking Top 6 % in. Square, Large Cool Ebonized Wood Handles, Fibre Feet, Complete with 6 ft. Mercerized Heater Cord with Standard Attachment Plug and New Improved Connector Plug, Weight Each Packed 10 1/4 Lbs..

Combines in one complete table stove the advantages of grill, toaster, chafer, fry pan and double broiler. exclusive feature is the special aluminum inset pan for use in the same manner as a chafing dish. Cooks above and below the heating unit at the same time.

One in a Carton, Three in a Package.

#### "RELIANCE" ELECTRIC CURLING IRONS



#### Nickel Plated, Black Enameled Wood Handle,

Each No. 501—25 Watts, 1114 in. Long, 1/8 in. Diameter Rod, Complete with 6 ft. Black Heater Cord, Standard Attachment Plug and Detachable Swivel Plug, Weight Each Packed ¾ Lbs......\$2.50 One in a Carton, Three in a Package,

## ELECTRICAL APPLIANCES

"UNIVERSAL" ELECTRIC CURLING IRONS AND HAIR DRYERS



Nickel Plated, Aluminum Comb or Hair Dryer

Complete with 6 ft. Art Silk Heater Cord and Standard Attachment Plug, 25 Watts.

White Enameled Wood Handle Each No. E-9201-Without Hair Dryer, 10 % in. Long Over

All, in Diameter Rod, Weight Each Packed 1 Lb.

No. E-92011-With Hair Dryer, Otherwise Same as No. E-9291, Weight Each Packed 11/8 Lbs.... 5.00

> Mahoganized Wood Handle Each

No. E-9801-Without Hair Dryer, 10 % in. Long Over All, in Diameter Rod, Weight Each Packed

No. E-98011-With Hair Dryer, Otherwise Same as No. E-9801, Weight Each Packed 1 1/8 Lbs. . . . . 4.50

Supplies the correct heat without scorching the hair, for only one-fifth of a cent an hour. The Hair Dryer dries the hair quickly after the shampoo or bath. New improved detachable swivel connector prevents twisting of the cord. One in a Display Carton; Six in a Package.

#### "THERMAX" ELECTRIC CURLING IRONS



Nickel Plated, Ebonized Wood Handle

Each

No. 3901-25 Watts, 10 % in. Long Over All, A in. Diameter Rod, Complete with 6 ft. Heater Cord and Standard Attachment Plug, Weight Each 

New Improved Detachable Swivel Plug Prevents Kinking and Twisting of the Cord.

One in a Carton, Three in a Package.

## "UNIVERSAL" ELECTRIC HEATING PADS



Soft and Flexible, conforms to any part of the body. Has a 3 Heat Cord Switch, operated (even in the dark) by pressure of the finger. Also has a pat-ented 4 Thermostat Control which absolutely maintains the Heat at the desired temperautre. (125°, 160° or 195°).

Costs less than half a cent per hour to operate. A Sleeping Porch necessity.

#### Gray Eiderdown Cover

No. E-9940-3 Heats, Maximum 65 Watts, 12x15 in., Complete with 10 ft. Heater Cord, Switch and Standard Attachment Plug, Weight Each Packed ...\$8.50 One in a Display Carton, Three in a Package.

## "THERMAX" ELECTRIC HEATING PADS

Brown Eiderdown Cover, Soft and Flexible

No. E-3194—3 Heats, 25, 40 and 65 Watts, 12x15 in., Three Heats controlled by Switch in Cord, Thermostats Automat-ically Maintain Heat at the Desired Temperature, Complete with 10 ft. Heater Cord and Standard Attach-Plug, Weight Each ment 



One in a Box, Six in a Carton.

# ELECTRIC WASHING MACHINES



#### GRAYBAR

Operates on Revolving Cylinder Principle, Four Straight Panels Conceal All Mechanism

Tank—Either 26 gauge galvanized iron or 23 ounce cold rolled copper tinned on inside.

Frame-All metal. Angle iron frame with sheet steel panels.

Wringer- Cast iron frame, gray enameled, soft rubber rolls

Cylinder.—Specially designed metal cylinder, keeps clothes from rubbing against perforations in cylinder.

Control—Two controlling levers operate the machine. One for cylinder and one for wringer. Both can be reached from any side of machine. Wringer lever is marked with an arrow that points in the direction the clothes go.

Swinging Wringer-Has five operating positions.

Safety Wringer Release—A touch of the wringer release bar instantly releases tension of rolls,

Sanitary Tank-No cracks, crevices or corners on the inside of tank to collect dirt.

Motor-1/6 Horse Power Western Electric Motor, A. C. or D. C.

Dull Gray Enamel Finish, Relieved by Blue Border, Complete with 10 Foot Cord and Standard Attachment Plug

One in a Crate.

# ELECTRIC IRONERS

# GRAYBAR

## Electrically Driven, Gas Heated

Small enough to fit into the majority of kitchens or laundries yet large enough to do all the work a larger ironer can do—at the small cost of 2½ cents an hour.

Reversible Roll—Non-rusting metal thickly padded and covered with muslin, circular and well ventilated, stronger than wood and cannot warp. It turns at the rate of 4 to 5 R. P. M., or an ironing speed of 9 feet per minute.

The reversible roll is an exclusive feature of this ironer. Simplifies operation. If goods going through the ironer start to wrinkle, a snap of the control switch reverses the roll and the goods back out.

Open End Roll-Makes it possible to iron ruffles, collar bands, etc., and takes care of the overhanging of goods wider than the roll.

The Shoe—Cast iron machined to shape and highly polished. Heated by a gas burner.

Pressure Spring—Au'oma ically adjusts the pressure of the shoe, thus allowing for varying thicknesses of cloth.

Electric Switch—Mounted on feed board. Starts and stops motor and causes roll to operate either forward or backward.

Hand Control-An upright lever convenient and easy to operate, for controlling shoe.

Foot Control-Separates shoe from roll when starting thick goods. Leaves hands free.

Feed Board-Comfortable height for the average woman.

Receiving Board—Prevents ironed clothes from dropping on the floor or in the operator's lap. Built at an angle which permits the operator to comfortably sit at machine or stand close to feed board.

Accessibility of Shoe-Shoe can be thrown back to a horizontal position making the entire surface accessible for cleaning

Enclosed Gears and Belt-Eliminate all danger to operator. Mechanism is practically noiseless and requires no attention.

Motor—1/10 Horse Power, reversible, drives the ironer through a heavy V shaped belt and a silent worm gear. Belt tension regulated by adjusting bolts. Motors can be furnished A. C. or D. C.



# ELECTRIC SAD IRONS

#### UNIVERSAL

Hand wound elements cover practically the entire surface of the Sole Plate of Universal Irons and contain nearly a third more resistance wire (insuring longer life) than other irons. Heat distributed from point to heel where most needed. Unequalled Heat Storage. Patented 7 Point Contact Connection Plug.

# UNIVERSAL, "WRINKLE-PROOF"

The Universal "Wrinkle-Proof" Iron, irons backwards and sideways as easily as forward, because of the Round Heel, an exclusive Universal Feature. No Corners or Sharp Edges to make extra work by catching or wrinkling the cloth on the back stroke. Tapered Point slips quickly and easily into the smallest pleats and ruffles of the daintiest lingerie.



#### Toggle Switch Model

By simply Pressing the Toggle Switch (contained in the detachable plug) the current may be instantly switched "on" or "off" permitting the use of the stored heat for all lighter work. Positive Action—a great convengence.

Complete with 6 ft. Black and Gold Cord with Detachable Connecting Plug and Reversible Heat-Proof Spring Stand



Complete with 6 ft. Mercerized Cord with Standard Attachment Plug and Reversible Heat-Proof Spring Stand

Large easy grip handle securely fastened by bolt passing completely through—cannot become loose—in the correct position to secure perfect balance, relieving much of the strain on the wrist.

One in a Carton, Six in a Case.

# UNIVERSAL, TOURISTS



For the tourists and week ender or the woman who travels. Presses blouses, laces, lingerie and all travel wrinkled garments. Can be used for heating curling iron and when reversed can be used as a hot plate.

Complete with 6 ft, Mercerized Cord with Standard Attachment Plug and Reversible Heat-Proof Spring Stand

Each

No. E-9021—For 110 Volts, 400 Watts, Full Nickel plated, Detachable Ebonized Handle, Cord Protected at Iron by Spiral Spring, Complete with Neat Green Velvet Bag; Weight Each 3 Lbs...\$5.00

# ELECTRIC SAD IRONS

#### DOVER

Dover Electric Sad Irons have the Patented "Vea No-Burn Out" Heating Element which is permanently sealed against those elements which cause burn-outs.

Rugged, Rigid, Pure Nickel Terminal Posts that will not rust or corrode are screwed and then riveted into Nickeled Brass Terminal Lugs. These Lugs will not come loose and cause "high resistance joints", the source of much trouble with heating appliances.

Unbreakable "Lavite" Insulating Bushing Insulates the Terminal Posts from the Hood and holds the posts in perfect alignment.

Double Life "Veriflex" Heater Cord will not kink.

#### LADY DOVER



#### Toggle Switch Model

A strikingly beautiful iron of lifelong service.

The Toggle Switch in the Connector Plug gives instant "on" and "off" control of the current.

Extreme slope of sides and rear, with long point give complete vis-

ibility of all ironing edges. Relieves eyes and eliminates bending and stretching to see work.

Complete with 6 ft. Black and Gold Silk and Cotton "Veriflex" Cord, 2 Deck Nickel Plated Stand

One in a Display Carton, Five in a Case.

# DOVER "DOMANCO"

An iron of distinct beauty, the iron of a lifetime for a lifetime.

Endorsed by National Board of Fire Underwriters, Good Housekeeping, etc.



Complete with 6 ft. "Veriflex" Cord with Attachment Plug and 2 Deck Nickel Plated Stand

Each

#### DOVER AUTOMATIC



Regulating screw gives any temperature desired between 300 and 6000 F. Iron turns current on and off maintaining desired temperature undefinitely.

Complete with "Veriflex" Cord and Stand

One in a Carton, Five in a Case.

# ELECTRIC FANS

#### ROBBINS & MEYERS

Drawn Steel Frame-Base, Motor Frame and End Heads are drawn from Heavy Gauge Sheet Steel.

Rotor—Built up of Steel Laminations, Conductors Solidly Riveted and Soldered to End Rings. Rotor Shaft is of High Carbon Steel with all Bearing Surfaces Ground Accurately to Gauge.

Stator—Steel Lamination Securely Riveted together. Winding is Thoroughly Insulated from the Core. Completed Core Securely Attached to Frame by Screws through End Heads.

Armature—Core is built up of Steel Laminations, Mounted Securely on High Carbon Steel Shaft, Winding well Insulated from Core, Best Grade Copper Commutator, Deep Segments, Mica Insulated.

Bearings and Oilers—Bearings are Large and Substantial, Phosphor Bronze Bushed, Lubricated by an Oil Cup at Each End of the Motor.

Adjustable Oscillating Mechanism—Positive in Action, Extremely Simple and Durable and Produces a Slow, Steady Oscillation. There is a Provision for Convenient and Positive Adjustment Gradually by a Fraction of a Degree for Air Direction from Full Sweep to Stationary, or Vice versa. All Gears and Pinions are Accurately Machined and Adjusted and Gear Box, Packed with a Season's Supply of Non-Fluid Grease, is Grease Tight.

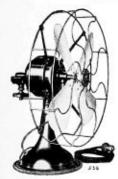
Blades—Firmly Constructed, Accurately Balanced, Designed for very Efficient and Effective Air Delivery. Their Shape and Pitch being Carefully Determined to give Maximum Breeze with Lowest Wattage and Least Noise.

Guards-Heavy Steel, Strong and Rigid and Securely Anchored to the Motor.

Base—So Constructed as to make it Practically Impossible to Accidently Overturn the Fan. The Felt Protection Permits Fans to be placed on Highly Polished Surfaces without Danger to the Finish.

For 110 Volts, with a Range from 10 Per Cent Lower to 10 Per Cent Higher

#### MODEL 38-OSCILLATING



Four Blades, Three Speeds, Drawn Steel Frame

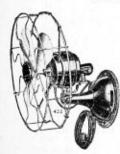
Four Point, Three Speed Switch, Felt Covered Base, Hinge Joint for Vertical Adjustment and Wall Mounting, Highly Finished in Baked Black Enamel Relieved with Gilt Lines on Motor and Base, Solid Brass Blades, Lacquered.

Induction Type Motor, 7 Complete Oscillations per minute, Full Sweep 95 Degrees.

Each

One in a Box.

#### MODEL 45—OSCILLATING



Four Blades, Three Speeds, Drawn Steel Frame

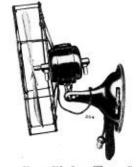
Four Point, Three Speed Switch, Felt Covered Base, Hinge Joint for Vertical Adjustment and Wall Mounting, Highly Finished in Baked Black Enamel Relieved with Gilt Lines on Motor and Base, Solid Brass Blades, Lacquered.

Induction Type Motor, Seven Complete Oscillations per Minute, Full Sweep 90 Degrees.

Embodies the latest improved construction of motor and base, being better in appearance, lighter in weight, coor running and very efficient.

One in a Box.

#### MODEL 47-NON-OSCILLATING





Four Blades, Three Speeds, Drawn Steel Frame

Four Point, Three Speed Switch, Felt Covered Base, Swivel Hinge Joint Provides for Wall-Bracket Mounting and Convenient Vertical or Horizontal Adjustment, Highly Finished in Baked Black Enamel Relieved with Gilt Lines on Motor and Base, Brass Blades, Lacquered. Induction Type Motor.

One in a Box.

#### MODEL 46—OSCILLATING



Four Blades, Three Speeds, Drawn Steel Frame

Four Point, Three Speed Switch, Felt Covered Base, Hinge Joint for Vertical Adjustment and Wall Mounting, Finished in Baked Black Enamel with Gilt Lines on Motor and Base, Steel Blades, Black Satin Finish.

Induction Type, A. C. Motor. Has a Single Oscillating Sweep making Five Complete Oscillations per Minute over 75 Degrees.

Each

No. 4602—10 in., A. C., 60 Cycles, Three Speeds, 1500 R. P. M. at 33 Watts, 1400 R. P. M. at 26 Watts, 1250 R. P. M. at 23 Watts, Complete with 8 ft. Cord and Standard Attachment Plug, Weight Each Packed About 17 Lbs......

# ELECTRIC FANS

ROBBINS & MEYERS

For 110 to 120 Volts

MODEL 43-NON-OSCILLATING





Wall Bracket Position.

Desk Position.

Four Blades, Three Speeds, Drawn Steel Frame

Four Point, Three Speed Switch, Felt Covered Base, Hinge Joint for Vertical Adjustment and Wall Bracket Position. Highly Finished in Baked Black Enamel with Gilt Striping Around the Base and Motor. Polished Solid Brass Blades, Lacquered.

Induction Type A. C. Motor.

Each

No. 4312—10 in., A. C., 60 Cycles, Three Speeds, 1560 R. P. M. at 27 Watts, 1300 R. P. M. at 21 Watts, 1100 R. P. M. at 18 Watts, Complete with 8 ft. Cord and Standard Attachment Plug. 

One in a Box.



#### MODEL 41—NON-OSCILLATING

Four Blades, One Speed, Drawn Steel Frame

Felt Covered Base, Hinge Joint Permits Tilting Backward or Forward, Finished in Baked Black Enamel, Steel Blades, Black Satin Finish.

Induction Type A. C. Motor.

Each

No. 4100-S-8 in., A. C., 60 Cycles, 1550 R. P. M. at 30 Watts, Complete with 8 ft. Cord and Standard Attachment Plug, Weight Each Packed About 

This is a good, durable, well constructed long life fan that is attractive in appearance, and gives a very effective breeze with practically no noise and at a low wattage consumption.

One in a Box, Ten in a Case.

# ELECTRIC HEATERS

"UNIVERSAL" STANDARD

Dark Bronze Enamel Finish, Heavy Metal Base, Water Leaf Design

No. E-9953—625 Watts, 12 in. Plain Solid Copper Reflector, Highly Polished, 16 in High Over All, Complete with 8 ft. Olive Green Mercerized Cord and Standard Attachment Plug, Weight Each Packed About 8 Lbs. \$7.50



One in a Carton. Three in a Package.

# ELECTRIC HEATERS

"UNIVERSAL" SUPER-FOURTEEN



Dark Bronze Enamel Finish, Heavy Metal Base, Water Leaf Design

No. E-9954-625 Watts, 14 in. Plain Solid Copper Reflector, Highly Pol-ished, Height Over All 16 in., Complete with 8 ft. Olive Green Mercerized 

One in a Carton, Three in a Package.

#### "UNIVERSAL" SUNFLOWER

"The Heater Beautiful," Florentine Bronze Finish Heavy Metal Base, Water Leaf Design

No. E-9955-625 Watts, 13 in. Solid Copper Fluted Re-flector, Highly Polished, 16 in. High Over All, Complete with 8 ft. Olive Green Mercerized Heater Cord and Standard Attachment Plug, Weight Each Packed 



One in a Carton, Three in a Package.

These "Universal" Electric Heaters bring clean, safe and cheery heat to small chilly places and are so very attractive that they form an ornament to any room.

Each model has a long life heating unit with Edison screw base which can be replaced in a moment. Detachable wire guards on all models, easily removable. Reflector is adjustable to any angle and has convenient cool handle on the back.

# HOME MOTORS

HAMILTON-BEACH



Operates on Both A. C. or D. C., 105 to 115 Volts 25 to 60 Cycles

Each

Home Motor-Complete with Cord, Attachment Plug Speed Control Pedal and Can of Oil, Weight 

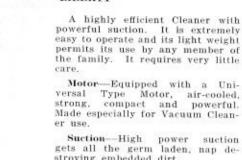
This amazingly simple motor makes any old or new sewing machine a self-operating electric machine. It is merely placed next to the hand wheel—that's all; no tools or screws or clamps or belts. The Machine is unmarred. Wearisome and health endangering pedal drudgery is abolished forever.

The machine always starts the right way automatically, never breaks a thread. Sews fast or slow or speeds between. Controlled by a slight pressure on the Speed Control Pedal.

Uses less than a cents worth of current an hour.

# ELECTRIC VACUUM CLEANERS

#### LIBERTY



stroying embedded dirt. Brush-An efficient double drive spiral nozzle brush picks up all sur-

face litter.

Handle-Equipped with soft rubber switch cap to protect the switch. Broad, strong cord hooks do not break the cord. An easily operated lock permits locking

handle in any desired position.

Bag-Dust-proof fabric, Bayonet lock bag connector and easy-on bag clamp.

Fan-Seven blade steel fan with flange to prevent hair and lint from winding around shaft on back of fan.

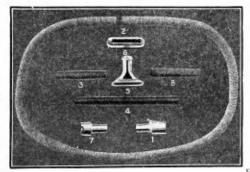
Attachments-Connected directly into the center of fan.

Nozzle Adjustment-A sensitive adjusting screw in the rear of motor gives a wide nozzle adjustment.

Construction-Built throughout of highest quality materials with graceful lines and high finish. Fully guaranteed.

Each Liberty—For 110 Volts A. C. or D. C., Complete with Cord and Plug, Net Weight Each 12 Lbs., Weight Each Packed with Attachments 18 Lbs. \$36.50 One in a Carton.

# ATTACHMENTS FOR LIBERTY ELECTRIC VACUUM CLEANERS



Per Set Liberty Attachments-8 Attachments as Enumerated Below ......\$8.50

# Contents of Set

No. 1-Suction Connecting Tool.

No. 2-Long Rubber Hose.

No. 3-Short Fibre Section.

No. 4-Long Fibre Section or Extension Tube.

No. 5-Cleaning Tool, to be Attached to No. 3 or Small End of No. 4 for Cleaning Clothes, Curtains, Drapes, etc.

No. 6-Upholstery Brush, Slides on No. 5. No. 7-Blower Connection Tool, to be Attached at Point

where Bag is Removed. No. 8-Soft Nose Blower Tool to be Attached to No. 3.

May Also be Used for Suction.

# ELECTRIC GLUE POTS

#### STA-WARM



"Sta-Warm" patented construction gives marvelous glue and time economy.

The heating element is wound tightly around cast aluminum inner wall so heat reaches glue instantly.

Regular Pot. Assessos in and con-Asbestos insulation verges it on the contents of the pot.

Automatic Heat Control or Thermostat keeps two-thirds of the current turned off except for a few minutes when starting the cold glue pot. Makes overheating impossible and protects the heating element from burning out. Thermostat set to maintain a temperature of 150 degrees.



Pot with Container Lifted.

The removable brush wiper saves glue; surplus scraped off brush, falls into pot. Also saves time in washing the pot.

For 110 Volt A. C. Regular. For 220 or Any Special Voltage on Request.

Cast Aluminum Pot, with Cast Aluminum Container 602 Nos. . . . . . . 601 603 604 605 1 Qt. 1/2 Gal. 1 Gal. 2 Gal. 5 Gal. Capacity ..... 1 Pt. Initial Amp. . . 1 2 3 4 5 Working Amp. . 14 1,6 34 1 1 14 1 34 Wt. Each, Lbs. 3 3 % 1034 6 16 1734 Each .......... \$14.50 16.75 19.25 29.10 40.00 60.00

Note-No. 606, 5 Gallon Size, Not Furnished with Container.

By actual test and meter record, figuring the cost of current at the extremely high rate of 5 cents per K. W. hour, the No. 602 quart pot can be operated for a full eight hour day for 3 cents. All glue is used, none wasted by boiling, burning or overcooking. Hours of time are saved, glue is always at correct heat. One in a Carton.

# ELECTRIC SOLDERING IRONS

# STA-WARM



Grey Iron Non-Corroding Socket, Extra Heavy Patented Heating Element, Looped Wiring, Strong Nickeled Steel Tube Drilled for Heat Radiation, Ebonized Hardwood Handle, First Quality Copper Tip, 110 Volts A. C. Regular.

#### Complete with 7 Ft. Cord and Separable Plug

Company was a com-	C	Trans.		_
Nos	701	702	703	704
Tip, Inches	36	34	1	1 1/2
Watts	100	175	250	350
Weight Each, Lbs	1 1/2	1 34	2 3/4	3.1/2
Each	84.50	7.00	9.00	14.00

One in a Box, Six in a Carton.

#### WHITE CROSS

Nichrome Wire Element. Best Materials < Throughout, Hard Handle, 110 Volts. Hardwood



#### Complete with Cord and Separable Plug

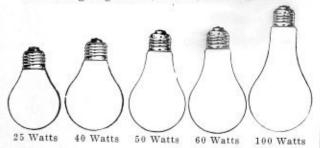
Each No. 670-12 % in. Long, Weight Each About 1 1/4 

Heats in less than 5 minutes. Ideal for repair and radio work.

# INCANDESCENT LAMPS

#### WESTINGHOUSE MAZDA

General Lighting Service, for 110, 115 and 120 Volts



25300.10	Approximate		Length.	
Watts	Lumens	Bulb	Inches	Each

# Type B, Clear, Medium Screw Base 10 70 S-14 3½ \$0.27 New Standard, Inside Frosted, Medium Screw Base

			The second services	APRESO
15		A-17	3 %	80.27
25	4.1	A-19	3 15	.27
40		A-21	$4\sqrt{c}$	.27
50		A-21	415	. 29
60		A-21	5 1/4	.32
100		A-23	676	.45
10 to	60 Watt, 120; 100	Watt, 24	in a Standard	



# Round Bulb, Type B, Outside Frosted, Medium Screw Base

Watts 15	Bulb G-18 3/2	Length, In.	Each <b>80.40</b>
25	G-18 1/2	3 %	.40
25	G-25	$4\frac{7}{16}$	. 50
40	G-25	4 7 6	. 50

G-18½ Bulb Lamps, 120; G-25 Bulb Lamps, 60 in Standard Package.



# Colored Lamps (Coated)

Flametint Lamps give a soft tinted lighting effect often desirable in homes, hotels, theatres, etc.

Substantially all the color effects required for decorative and display lighting in theatres, restaurants, signs, etc., can be produced by the colored and tinted lamps listed below.

#### New Standard, Medium Screw Base

Watts	Bulb	Length, In.	Each
	Fla	ametint	
15	A-17	3 %	\$0.32
25	A-19	3 18	.32
40	A-21	4 7/2	.32
50	A-21	4 18	. 34
60	A-21	5 1/4	. 37

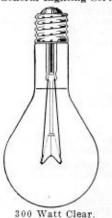
#### Red, Blue, Green, Yellow and Amber-Orange Colors

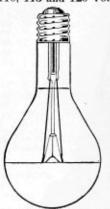
15	A-17	3 56	80.37
25	A-19	3 15	- 37
40	A-21	4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	.37
50	A-21	4 18	. 39
	120 in a Star	dard Package	

# INCANDESCENT LAMPS

WESTINGHOUSE MAZDA

General Lighting Service, for 110, 115 and 120 Volts





	300 Watt Clear.	300	Watt White	Bowl
	Approximate		Length,	
Watts	Lumens	Bulb	Inches	Each
	Type C, Clea	ar, Medium S	crew Base	
150	2300	PS-25	618	\$0.60
200	3200	PS-30	8 1/8	. 80
	Type C, Cle	ar, Mogul S	crew Base	
300	5200	PS-35	9-7	\$1.25
500	9400	PS-40	911	2.00
750	15000	PS-52	133%	3.50
1000	21000	PS-52	131/8	3.75
Watts	Bulb	Len	gth, In.	Each
	Type C, White	Bowl, Mediu	m Screw Base	e
150	PS-25		6 1/2	80.65
200	PS-30		8 1/8	.85
	Type C, White	Bowl, Mogu	l Screw Base	,
300	PS-35		9 7	\$1.35
500	PS-40		9 18	2.15
750	PS-52	13	3 1/8	3.70
1000	PS-52	13	3 1/8	3.95
150 to	o 300 Watt, 24; 5 8 in a 8	00 Watt, 12; Standard Pac	750 and 100 ckage.	00 Watt,





Watts Bulb Length, In. Each
Type C, Daylight Blue, Inside Frosted, Medium

60 A-21 4 H \$0.52 100 A-23 6 H 6 Watt, 120; 100 Watt, 60 in a Standard Package.

Type C, Daylight Blue, Medium Screw Base 50 PS-20 5 % 60 75 PS-22 .65 100 PS-25 648 .75 150 PS-25 618 1.00 200 PS-30 1.30 Type C, Daylight Blue, Mogul Screw Base 300 PS-35 9 7 1.85 500 PS-40 9.1 2.85

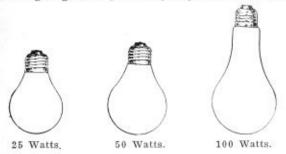
Mazda C Daylight Lamps have bulbs made of a special blue glass to produce light approximating average daylight quality.

50 and 75 Watt, 60; 100 to 300 Watt, 24; 500 Watt, 12 in a Standard Package.

# INCANDESCENT LAMPS

WESTINGHOUSE MAZDA

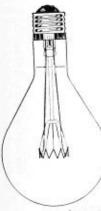
Special Lighting Service, For 220, 230, 240 and 250 Volts



# New Standard, Inside Frosted, Medium Screw Base

Watts	Bulb	Length, In.	Each
25	A-19	3 12	\$0.32
50	A-21	4 78	.32
100	A-23	6 18	.55

25 and 50 Watts, 120; 100 Watts, 24 in a Standard Package.



The 750 and 1000 Watt Lamps in the list below are designed for base up burning position. Lamps ordered for base down burning position may be supplied at the same price.

Watts	Approx. Lumens	Bulb	Length, Inches	Each
watts	Type C, Clea			
000	2600	PS-30	8 1/4	\$1.00
200	2600	15.00	0 /8	4-2-3-3
	Type C, Cle	ar, Mogul	Screw Base	
300	4300	PS-35	9 70	\$1.50
500	8200	PS-40	918	2.40
750	13000	PS-52	13 1/8	4.00
1000	18000	PS-52	13 1/8	4.50
		τ	ngth, In.	Each
Watts	Bulb			10000
	Type C, White	Bowl, Medi	um Screw Ba	se
200	PS-30		8 1/8	\$1.10
	Type C, White	Bowl, Mog	ul Screw Bas	e
300	PS-35		9 78	\$1.60
	PS-40		913	2.55
500	PS-52		13 1/8	4.25
750 1000	PS-52		131/8	4.75
	W-2012 NO. 10			
All Abo	ove, 200 and 300 1000 Watt, 8	Watt, 24; in a Stand	500 Watt, 12 lard Package.	2; 750 and

General Lighting Service, For 110, 115 and 120 Volts Decorative Lamps



# All Frosted, Candelabra Screw Base

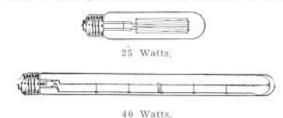
Watts Bulb D-10	Length, In.	\$0.50
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Sixty in a Standard Package.

# INCANDESCENT LAMPS

WESTINGHOUSE MAZDA

General Lighting Service, For 110, 115 and 120 Volts



Type B, Tubular Clear, Medium Screw Base

Watts	Bulb	Length, In.	Each
25	T-10	5 %	\$0.45
40	T-8	11 %	1.15

25 Watts, 60; 40 Watts, 24 in a Standard Package.

#### MAZDA LAMPS

A Mazda lamp is always the product of the latest and best methods of incandescent lamp making. The filaments of all Mazda lamps are at present made of tungsten. When any more suitable product is discovered or developed it will be used.

In a Maza B Lamp the filament operates in a vacuum, In a Mazda C Lamp the filament operates in an inert gas.

#### The New Standard Line

These new lamps represent the latest development in incandescent lamp manufacture. Outstanding points of superiority over all other types are:

Easily Cleaned-The frosting is on the inside and

the bulb therefore does not gather dirt.

Better Lighting—Splendid diffusion is obtained with such small loss of light that these lamps are to be used in place of all clear as well as frosted lamps.

3. Stronger-These lamps are much more rugged than the lamps they will supersede. Breakage will be appreciably less.

4. Attractive Appearance-The pearl-gray bulb is pleasing in appearance and harmonizes with any background color.

5. Simplified Stocks-Five types replace more than forty old types and sizes in the 115 volt class.

#### NOTE

We are glad to quote and are able to supply Westinghouse Mazda Lamps for any purpose not shown above. We carry in stock a complete line for country home lighting service at 28-32 volts; also decorative lamps in me-dium and candelabra base in both Flametint and Frosted.

# FRICTION TAPE



Per Pound ...... \$0.60

.60

# YALE FLASHLIGHTS

The advent of the Yale Line marks the beginning of a new era in flashlight construction. In a class by itself,

the Yale is the Masterpiece of Flashlights.

All Yale Lens Rings are drawn from finest quality sheet brass, octagon in shape with smooth, slightly rounded Bulls eye lenses are moulded from highest quality clear glass, hand ground and polished. Flat type lenses are made from finest quality French plate, hand beveled. Reflectors are scientifically designed and heavily silver plated. The head assembly combines all parts into a single unit, while the bulb assembly insures perfect alignment, affords long life and makes bulb renewal simplicity itself. The new patented Contact Box with Locking Device gives a contact mechanism wonderfully smooth in action, durable, designed for service.

Nickel Case—Extra heavy, finest quality brass used throughout, highly polished, triple nickel plated finish.

Fibre Cases—Patented Wireless Fibre Case made of well seasoned, specially treated fibre with handsomely corrugated surface, will withstand the hardest usage and are absolutely moisture proof.

All Flashlights are Furnished with Bulb Only. Batteries are Extra and Not Sent Unless Ordered

#### TUBULAR TYPE



Corrugated Fibre Case, Nickel Plated Trimmings

	Each
No.	2001-5 % x1 % in., without Battery \$1.25
No.	101—Yale Mono-Cell (2 Required)
No.	11-Renewal Mazda Lamp, 2.33 Volts12
No.	2101-6 34 x1 % in., without Battery 1.50
No.	102—Yale Mono-Cell (2 Required)
No.	16—Renewal Mazda Lamp, 2.4 Volts12
No.	3101-9 1/8 x1 1/8 in., without Battery 1.75
No.	102—Yale Mono-Cell (3 Required)
No.	17—Renewal Mazda Lamp, 3.6 Volts12



No. 2102 Nickel Plated Brass Case Each No. 2002-5% x1% in., without Battery . . . \$1.25 101-Yale Mono-Cell (2 Required). . 15 No. No. 11-Renewal Mazda Lamp, 2.33 Volts., .12 No. 2102-6 % x1 % in., without Battery . . . . . . . . 1.50 -Yale Mono-Cell (2 Required)..... 102-.17 No. 16-Renewal Mazda Lamp, 2.4 Volts..... No. .12



MINER TYPE

Corrugated Fibre Case, Nickel Plated Trimmings

	Each
No.	2003-6x1% in., without Battery \$1.45
No.	101-Yale Mono-Cell (2 Required)
No.	11—Renewal Mazda Lamp, 2.33 Volts12
No.	2103-6 % x2 1/2 in., without Battery 2.00
No.	102-Yale Mono-Cell (2 Required)
No.	16-Renewal Mazda Lamp, 2.4 Volts



	Nickel Plated Brass Case.	Each
No.	2004-6x1% in., without Battery	.81.45
No.	101—Yale Mono-Cell (2 Required)	15
No.	11—Renewal Mazda Lamp, 2.33 Volts	12
	FOCUSING SPARCHLIGHT TYPE	



Corrugated Fibre Case, Nickel Plated Trimmings

		Each
No.	3205-9 14 x 3 1/8 in., without Batt	ery
No.	102-Yale Mono-Cell (3 Requi	red)
No.	13-Renewal Mazda Concentr	rated Lamp, 3.6
	Volts	

#### SPOTLIGHT TYPE

Throws a Clear, Sharp Beam of Light Over 300 Feet

The focusing type flashlight with its clear, sharp beam has caught the popular fancy. The Yale Spotlight is designed for service and is a Spotlight you can really focus.

It has all the patented Yale features with a bulb that has a specially designed concentrated filament to give most powerful light beams. The Yale patented focusing adjustment makes it simple to train this light on a given object until exact range is obtained.

The mechanism cannot work loose. It is a compact unit at the head of the light. Can be used as a regular flashlight and by unscrewing focusing device the Yale can be placed on a table and used as a candle light.



No. 3201

# Corrugated Fibre Case, Nickel Plated Trimmings

		27.047.11
	2201-6 1/4 x 2 1/8 in., without Battery	
No.	102-Yale Mono-Cell (2 Required)	.17
No.	14-Renewal Mazda Concentrated Lamp, 2.4	
	Volts	
No.	3201-8 % x2 1/8 in., without Battery	3.00
No.	102-Yale Mono-Cell (3 Required)	.17
No.	13-Renewal Mazda Concentrated Lamp, 3.6	
		. 15



Nickel Plated Brass Case

No.	3202-	-8 % x 2 1/8	in., with	hout Battery		3.00
No.	102-	-Yale Mon	o-Cell (	3 Required) Concentrated		.17
				concentrated	Lamp, 5.6	.15

# ELECTRIC LANTERNS SUPREME

Complete with Three Unit Cells and Mazda Bulb

Each No. 100—8 in. High, 5 in. Wide, Burns 12 Continuous Hours or 6 Months Intermittent. Weight Each without Battery 

Has screw bottom and screw top globe, heavy switch lever and heavy wire bail. Wire guard protects bulb.

An electric light whenever and whereever needed. Throws a big bright light in every direction without shadows. The ideal portable light for motorists, campers, fishermen, farmers and around the home. Hangs or sits anywhere, leaving both hands free. No fire danger, no spilling, weather-proof.

One in a Carton.



# FLASHLIGHT BATTERIES

YALE MONO-CELL

Fit All Standard Tubular Flashlights



The drapper or cardboard jacket is made integral with the battery itself-cannot separate from the battery and permit it to slide from the wrapper. It is positively and hermetically sealed and impossible to short circuit.

The two sizes shown will supply 95% of flashlight battery requirements and eliminates the usual complexity of stock.



E	100	a.	la .
- 12	151	к.	11

No.	101-1 Cell, 1% in. High by 1 in. Diameter, 4
	Months' Shelf Life
No.	102-1 Cell, 2% in. High by 1% in. Diameter,
	6 Months' Shelf Life

Thirty in a Unit Package.

2	No.	101	Mono-Cells	Equivalent	to	1	No.	110	Battery.
2	No.	102	Mono-Cells	Equivalent	to	1	No.	111	Battery.
2	No.	102	Mono-Cells	Equivalent	to	1	No.	112	Battery.

#### YALE TUBULAR



Nos	110	111	112	113	
No. of Cells		2	3	2	
Height, In	3 34		7		
Diam., In		1 1/4			
Each	\$0.30	.35	.50	.25	

#### YALE VESTPOCKET

Nos,	114	115	116	117
No. of Cells		2	3	3
Height, In	1 1/8	2 34	2 1/4	2 %
Width, In	1 1/8	1 1/4	1 %	2 1/2
Depth, In	1/2	5/8	5/8	34
Each	\$0.30	.30	.40	.40



# YALE BOX TYPE

Nos	118	119	120	121
No. of Cells	3	5	2	3
Height, Inches	3	3	2 1/2	3
Width, Inches	3 7/8	3 5/8	1 %	3
Depth, Inches	1 %	3 %	18	2 1/2
Each	80.65	.110	.30	. 65

# FLASHLIGHT LAMPS

Cuts Half Size.







All Clear, Miniature Screw Base



16, 17, 19 13, 14 11 Nos. 1, 2

	All Chem, as		TO 0.1 TAKE 1
Bulb Amperes .		1 2 FE.3 % FE.3 % .25 .25 2.2 3.3	11 13 G-3 ½ G-3 ½ .27 .29 2.33 3.6
		00 10 10	.12 .15
Nos		14	16 17 G-4 16 G-4 1/2
Bulb		6-3 1/2	G-4 ½ G-4 ½ 29 .29
		10.000000000000000000000000000000000000	2.4 3.6
		44 45	.12 .12
		1,000	31 35
Nos			G-4 1/2 G-5 1/2
Bulb		4.0	.29 .80
Amperes .		4 05	6.0 2.4
Volts		A REPORT OF THE PARTY OF THE PA	.15 .12
Each			a that the cor-

Note-Care should be taken in ordering that the correct lamp is specified for the particular type of battery which the lamp is to be operated on.

Ten in a Unit Package.

# RADIO BATTERIES

# YALE POWERPACK "A"



A single six inch Dry Cell especially selected for Radio use, equipped with one positive and one negative binding post. Two of these may be used to operate a single WD11 or similar dry cell vacuum tube.

Each

No. 101R-1 1/2 Volts, 1 Cell. 2 % x2 % x 6 1/2 in., Weight Each 2 1/4 Lbs.... \$0.45

#### YALE "B"

When 45 volts are. required, it is preferable to use this battery rather than two 22 1/2 volt batteries.

It contains thirty large cells and is very convenient as it can be used for detector tube con-trol as well as for amplifiers.



Equipped with one negative and six positive spring clips giving 16 ½ to 22 ½ volts in 1 ½ volt steps for detector tubes and a 45 volt tap for amplifier tubes.

No. 3045—45 Volts, 30 Cells, 718 in. Long, 6 % in Wide, 3 % in. High, Weight Each 7 % Lbs.....83.75

# THERMOMETERS

AMERICAN



No. 100

#### Armco Metal Steel Frame

White Porcelain Enameled Both Sides, Raised Scale, Black Enam-eled Guard, Black Figures on Scale.

Magnifying Red Spirit Filled Tube, with Milk Back

Per Dozen

No. 100-9x2 1/4 in., Approximate Scale Range 20° Below to 120° Above Zero, Weight Per Dozen About 



60

40

20

Armco Metal Steel Frame

White Porcelain Enameled Both Sides, Black Enameled Guard, Black Figures on Scale.

Magnifying Red Spirit Filled Tube, with Milk Back Per Dozen

No. 101-7x2 in., Approximate Scale Range 40° Below Zero to 120° Above, Weight Per Dozen 



## Steel Frame

White Enameled Throughout, Black Enameled Numerals and Division Marks on Scale.

Magnifying Red Spirit Filled Tube (Non-Fading) Per Dozen

No. 75—5½x1¼ in. Approximate Scale Range, Zero to 120° Above, Weight 

A real household thermometer. Easy to clean.

All Above, One Dozen in a Box.

# THERMOMETERS JAPANNED TIN CASE



#### Ordinary Grade

Lithographed Tin Scale. Black Figures and Graduations, Black Japanned Tin Case, Approximate Scale Range 20° to 60° Below Zero to About 120° F. Above.

#### Magnifying Permacolor Filled Tube (Easy Reading and Non-Fading)

NO.	CONTRACTOR	CARL COLORS	0440-5/8
Len	gth, Inc	hes	8
Wt.	Dozen,	Lbs	1 3/4
Per	Dozen		\$3.00
	One Do	zen in :	a Box.

#### Selected Ordinary Grade

Black Oxidized Brass Scale, White Filled Figures and Graduations, Black Japanned Tin Case, Approximate Scale Range 20° to 60° Below Zero to 120° F. Above.

#### Magnifying Permacolor Filled Tube (Easy Reading and Non-Fading)

No	5420-S/8
Length, Inches	
Wt. Dozen, Lbs	2 1/2
Per Dozen	\$12.00
No	5420-S/10
Length, Inches	10
Wt. Dozen, Lbs	3 1/2
Per Dozen	\$15.00
One Dozen in a B	ox.

#### COPPER CASE Best Grade

Black Oxidized Brass Scale, White Filled Figures and Graduations, Approximate Scale Range 10° to 40° Below Zero to 120° F. Above.

#### Magnifying Distilled Mercury Filled Tube

No	5	400-P/10
Length, Inches .		10
Wt. Dozen, Lbs.		6
Per Dozen		\$30.00
No		
Length, Inches .		12
Wt. Dozen, Lbs.		8
Per Dozen		\$33.00
- D O 1-10	T	

Per Dozen ..... \$33.00 One in a Box, One-half Dozen in a Carton.

# WOOD BACK

Ordinary Grade Black Lithographed Tin Scale, White Filled Figures

and Graduations. Walnut Finished Wod Back, Approximate Scale Range 20° to 60° Below Zero to 120° F. Above.

#### Magnifying Permacolor Filled Tube (Easy Reading and Non-Fading)

No.			5140-S/8
Len	gth, Inc	hes	8
Wt.	Dozen,	Lbs	3 1/2
Per	Dozen		\$6.50
No.			5140-S/10
Len	gth, Inc	hes	10
Wt.	Dozen,	Lbs	5
Per	Dozen		89 00

One in a Box, One Dozen in a Carton.

# THERMOMETERS

WOOD BACK



Ordinary Grade

Blue, Green and Black Assorted Metal Scales, Nickel Plated Straps and Bulb Guard, Gray Fin-ished Wood Back, Approximate Scale Range 20° to 60° Below Zero to 120° F. Above.

Magnifying Permacolor Filled Tube (Easy Reading and Non-Fading)

No. . . . . . . . . . . . . 5151-S/8 Length, Inches. Wt. Dozen, Lbs. 3 Per Dozen.... \$9.00 One Dozen in a Carton.

#### Best Grade

Black Oxidized Bevel-Edged Brass Scale, White Filled Figures and Graduations, Gold Plated Screws, Tube-Clasps and Bulb Guard, Natural Oak Finished Wood Back, Approximate Scale Range 20° to 60° Below Zero to 120° F. Above.

Magnifying Permacolor Filled Tube (Easy Reading and Non-Fading)

No. . . . . . . . . . . . 5100-S/8 Length, Inches . . 8 Length, Inc., 5 Wt. Dozen, Lbs. 5 \$22.00 Per Dozen.... Wt. Dozen, Lbs. Per Dozen.... \$26.00

One-half Dozen in a Carton.

# DISTANCE READING

# Selected Ordinary Grade

Black Oxidized Brass Scale, White Filled Figures and Graduations, Coppered Metal Case, Approximate Scale Range 20° to 60° Be-low Zero to 120° F. Above.

Magnifying Permacolor Filled Tube (Easy Reading and Non-Fading)

...... 5154-S/8 Length, Inches . . Wt. Dozen, Lbs.. Per Dozen .... \$10.00 One Dozen in a Carton.

#### DAIRY

# Selected Ordinary Grade

Brass Scale, Engraved Figures and Graduations, Sliding Bulb Guard, Flanged Metal Case, Approximate Scale Range 20° to 220° F.

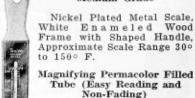
White Back Permacolor Filled Tube (Easy Reading and Non-Fading)

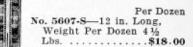
Per Dozen No. 5740-S-8 in. Long. Wt. Dozen 4 Lbs. . \$11.00 One in a Box, One Dozen in a Carton.

# THERMOMETERS

BATH

#### Medium Grade





One in a Box, One Dozen in a Carton.

#### REGISTERING

#### Best Grade

Lacquered Polished Brass Scale, White Filled Figures and Graduations. Black Japanned Tin Case, Approximate Scale Range 10° to 30° Below Zero to 120° F. Above.

#### Mercury Filled Tube Per Dozen No. 5452-8 in. Long,

Weight Per Dozen 8 Lbs. . . . . . . . . . . \$84.00

Set by drawing the "index" in each side of the mercury column, by use of the magnet furnished with each thermometer. As the temperature fluctuates after the thermom-

eter has been set, the mercury will rise in one side or the other, leaving the index in each case to show what has been the greatest degree of heat or cold since the last setting.

One in a Box.

# INCUBATOR



Black Oxidized Brass Scale, White Filled Figures and Graduations.

Plain Glass Tubes Filled with Distilled Mercury. Has Flange on Upper Edge of Scale to Hook Over Wire or Metal Strip if Used without the Stand.

Per Dozen No. 5783—Angle Pattern, 4 in. Long, with Metal Stand, Weight Dozen 1 % Lbs. . . \$14.00 One Dozen in a Carton.











# PREPARED PAINT

# PIONEER





For the greater part of a century "Pioneer" Prepared Paint has been marketed as the best mixed paint that could be made. As an exterior and interior finish, it has proven durable, attractive and, as it gradually wears away, leaves a surface entirely suitable for repainting.

The formula on which "Pioneer" Prepared Paint is manufactured has kept step with every improvement in the paint industry and is today looked upon as the same high grade finish that it was years ago. From the standpoint of durability, covering capacity, hiding power and even wearing qualities, "Pioneer" is by far the most economical paint on the market.

#### Colors

*Outside White *Outside Flat White *Inside White *Inside Gloss White *Moss Green **No. 401—Green **No. 305—Cherry Red **No. 402—Blue No. 104—Black	No. 14—Colonial Yellow No. 89—Buff No. 63—Light Yellow No. 40—Terra Cotta No. 102—Tan No. 93—Maroon No. 92—Morocco Brown No. 38—Medium Green No. 81—Red	No. 64-0	ink awn late rown teel Blue ream White	No. 1 No. 1 No. 1 No. 2 No. 2 No. 9	8—Ivory 8—Light Gra 8-1—Light Le 8-2—Lead Col 3-3—Blueston 20—Medium I 7—Pure Brov 92—Light Gre 97—Swiss Gre	y add lor e 31ue wn een
No. R-1—Straw	No. 82—Marvel	140. 23-1	ottle Green	240. 0	1 50155 010	
Cans in Case	Per Ca Per Ca	16 20 an \$0.50	1 Pt. 12 30 .90 .90	1 Qt. 12 60 1.60 1.60	36 Gal. 60 3.00 3.00	1 Gal. 6 120 5.65 5.65

\*Add 10 cents per gallon to above prices for these colors.

\*\*Add 30 cents per gallon to above prices for these colors.

Note-5 gallon cans, 5 cents; half barrels, 15 cents; barrels, 25 cents per gallon less than 1 gallon can prices.





#### KEYSTONE

A high quality product made on a scientific formula. All materials entering into the manufacture of "Keystone" paint must first pass chemical laboratory tests so no inferior grade of material can find its way into a "Keystone" paint can.

"Keystone" paint has established itself as a protective coating for interior or exterior work of real merit. It wears well, covers most satisfactorily and after years of wear still leaves the surface in excellent condition for repainting.

"Keystone" paint is offered on a quality basis and is not to be confused at all with the cheap third and fourth grade paints on the market under various names and of questionable quality.

# Colors

*No. 370—Outside White *No. 366—Inside Gloss White *No. 362—Moss Green **No. 353—Green **No. 361—Cherry Red **No. 352—Blue Black	No. 363—Light Yellow No. 384—Tan No. 380—Princess Brown No. 341—Cream No. 314—Colonial Yellow No. 382—Light Fawn No. 389—Buff	No. 318— No. 308—	-Pink -Fawn -Terra Cotta	No. 3 No. 3 No. 3 No. 3 No. 3	67—Lead 05—Slate 20—Light Blu 93—Maroon 90—Light Gre 38—Medium 64—Olive Gre	een Green
Size of Cans. Cans in Case. Weight Case, Lbs. Regular Shades		18 80.40	1 Pt. 12 27 .75 .75	1 Qt. 12 54 1.30 1.30	32 Gal. 6 54 2.50 2.50	1 Gal. 6 108 4.60 4.60

\*Add 10 cents per gallon to above prices for these colors.

\*\*Add 30 cents per gallon to above prices for these colors.

Note-5 gallon cans, 5 cents; half barrels, 15 cents; barrels, 25 cents per gallon less than 1 gallon can prices.

# BARN AND ROOF PAINT PIONEER PURE LINSEED OIL



From the standpoint of durability and appearance, no better paint can be made.

Highest grade red oxide ground and reduced in pure linseed oil with the addition of the necessary drier, insures long wear, great covering and an appearance that is truly satisfying.

#### Red Only

Size Packages	1 Gal. Can	5 Gal. Can	1/2 Bbl.	1 Bbl,
Packages in Case	6	1		
Weight Case, Lbs	85	7.0	365	725
Per Gallon	84.45	4.40	4.30	4.20



#### NEVIN METALLIC

A red oxide metallic paint suitable for any exterior surface where color is of less importance than wearing quality. Manufactured from a durability standpoint to give dollar for dollar value.

#### Price Per Gallon

Size Packages	1 Gal. Can	5 Gal. Can	1/2 Bbl.	1 Bbl,
Packages in Case	6	1		
Weight Case, Lbs	8.5	70	365	725
No. M-81-Red	\$2.55	2.50	2.40	2.30
No. M-74-Brown	2.55	2.50	2.40	2.30
No. M-5-Slate	2.80	2.75	2.65	2.55
No. M-104-Black	2.80	2.75	2.65	2.55
No. M-10-Gray	3.20	3.15	3.05	2.95
No. M-304-Green	3.20	3.15	3.05	2.95
Color Card	s Furnishe	d on Reque	st.	

#### PIONEER BLACK ASBESTOS

A combination of durable oils, gilsonite, pine tar and long fiber asbestos. Can be applied to old or new roofs of any kind. Waterproofs and preserves.

Size Packages	1 Gal. Can	5 Gal. Can	1/2 Bbl.	1 Bbl.
Packages in Case	6	1		2.4
Weight Case, Lbs	8.5	7.0	365	725
Per Gallon	81.40	1.15	1.10	1.00

# ROOF CEMENT

#### BLACK ASBESTOS FIBER

For patching roofs, coating skylights, fire walls and wherever waterproofing is necessary, 550 Size Packages. . . 1 Lb. Can 8 Lb. Can 40 Lb. Can Lb. Bbl. Pkgs, in Case . . . Per Pound..... 80.20 .15 . 13 16 . 11

#### SHINGLE STAIN PIONEER



A high grade creosote oil into which has been incorporated a high grade of permanent colors, serves and beautifies any wood surface.

	Colors		
Nos. 301—Light Moss Green 205—Light Brown 320—Dark Red 102—Morocco Brown 144—Dark Walnut 103—Black	208—Lig 209—Ch 203—Co	ver Gray rk Moss Green tht Chestnut rome Green pper Brown rk Brown	
Size Packages	1 Gal Can	5 Gal. Can	1 Bbl.
Packages in Case		1	7.1
Weight Per Case, Lbs		5.0	525
Per Gallon	82.35	2.20	1.80
Color Cards Fr		Request	2000

# WALL TONE



#### PIONEER

Recognized as the standard interior finish by which all other interior finishes are judged.

Wall Tone is a Flat Oil Finish, sanitary, durable, washable. Drying with a very pleasing soft luster. Wall Tone can be stippled, mottled or stenciled and effects produced that are impossible in any other way.

Wall Tone can be applied on any wall surface over plaster, wood or metal, in fact, on most any interior surface and over any sort of a previous coat. It can be used on metal ceilings, radiators, concrete, sanitas, burlap, canvas, old wall paper, window shades, etc. It is not rec-ommended as a substitute for "Pioneer" Enamel Undercoat as an undercoater for enamel.

#### Colors

No. 690—White	No. 834—Ivory
No. 861—Pearl Gray	No. 850—Cream
No. 872-French Gray	No. 856—Buff
No. 851—Pink	No. 857—Tan
No. 852—Light Blue	No. 858—Brown
No. 853-Light Green	No. 860—Delft Blue
No. 854-Olive Green	*No. 859—Crimson
No. 855—Dark Green	
No. 851—Pink No. 852—Light Blue No. 853—Light Green No. 854—Olive Green	No. 857—Tan No. 858—Brown No. 860—Delft Blue

Size Cans	16 Pt.	1 Pt.	1 Qt.	14 Gal.	1 Gal.
Cans in Case	16	12	12	6	6
Weight Case, Lbs	16	2.5	5.0	50	100
Per Can		. 65	1.25	2.40	4.40

\*Add 80¢ per gallon to above prices for No. 859 Crimson.

Color Cards Furnished on Request.

# GRAINING COLORS PIONEER OIL STAIN



Ready mixed for new work or for refinishing old work. "Pioneer' Oil Stain Graining Colors produce a finished effect that is extremely pleasing. Gives a stained and grained effect that is a happy combination.

On old work, it should be applied over a ground color, then combed, stippled or mottled, and, when thoroughly dry, a finishing coat of high grade varnish applied, to result in a perfect job.

5.00

On new work, "Pioneer" Oil Stain Graining Color can be applied directly to the wood and after drying for about ten minutes, should be wiped off. The shade, light or dark, is determined by the length of time the stain remains on the wood before being wiped off.

Light Oak Flemish Oak Dark Oak	Golden Cherry Dark Ma		Mah Wal Rose		
Size Cans Cans in Case Weight Case, Lbs. Per Can	. 16 . 10	1 Pt. 12 15 . 80	1 Qt. 12 30 1.40	34 Gal. 6 30 2.70	1 Gal. 6 60 5.00

Color Cards Furnished on Request.

# INTERIOR ENAMEL



#### PIONEER

A high grade enamel that produces a washable glossy finish on any surface

It can be used not only on woodwork and walls, but on furniture, radiators, where a quick, hard-drying, high gloss finish is desired.

#### Group No. 1 Colors

Blue Gray. Light Green. Old Rose. Ivory.

Orange. Wicker Brown. Light Blue. White.

Cream. French Gray. Medium Green

#### Group No. 2 Colors

Dark Blue.	Red	and (	Green (	Chair E	namel.
Size Cans	1/2 Pt.	1 Pt.	1 Qt.	1/2 Gal.	1 Gal.
Cans in Case	16	12	12	6	6
Weight Case, Lbs					
No. 1 Colors Per Can.	\$0.55	.95	1.60	3.15	5.80
No. 2 Colors Per Can.	.60	1.10	1.95	3.65	7.00
			2.5		

Color Cards Furnished on Request,

# WHITE ENAMEL

#### NEVIN QUALITY

The highest grade of white enamel on the market. Being made on a high grade oil base, it is a slow drying, long wearing finish of highest quality, very easy to apply, and its yellowing tendencies have been reduced to a minimum.

Can be rubbed to a dull finish and can be tinted to any shade with colors in oil.

Size Cans	14 Pt.	1 Pt.	1 Qt.	14 Gal.	1 Gal.
Cans in Case	16	12	12	6	6
Weight Case, Lbs	14	21	42	42	84
Per Can	\$0.80	1.30	2.35	4.40	8.35

# ENAMEL UNDERCOAT

#### PIONEER

A good enamel job depends entirely on the undercoat and "Pioneer" Enamel Undercoat is second to none from

a quality standpoint.

Used under either Nevin Quality Enamel or Pioneer Interior Enamel, it insures a job of the highest character. It gives a solid, non-porous surface on which to apply the enamel. May be used as an undercoater on walls or any wood surface.

Size Cans	34 Pt.	1 Pt.	1 Qt.	16 Gal.	1 Gal.
Cans in Case	16	12	12	6	6
Weight Case, Lbs	14	21	4.2	42	8.4
Per Can	\$0.50	. 75	1.35	2.40	4.55

# GOLD ENAMEL

# PIONEER

# In Compartment Cans

Cans																	34 P	16 Pt. . 95	1 Pt. 1.65
				r	w	6	lx	re	(	9	4.1	n	8	in	n a	Ca	rton.		

# ALUMINUM ENAMEL

#### PIONEER

# In Compartment Cans

				1 Pt. 1.65
	Twelve Cans i	n a Car	eton	

The liquid and powder are in separate compartments allowing the user to mix his paint as he needs it, eliminating all waste.

# AUTOMOBILE ENAMEL

#### PIONEER



Made from the highest grade of permanent colors, thoroughly ground in a waterproof, durable automobile finishing varnish Because of the fineness of grind-ing, "Pioneer" Automobile En-amel levels off to a glass-like surface, giving a high gloss durable finish that is as beautiful and as durable as the original finish on the car

Entirely suitable for use on store fronts, boats, porch furniture or any surface where a brightly colored high gloss finish is desired.

#### Colors

	Gray. *Cream. *Garnet.		*Blue. *White *Clear	e.	
Size Cans	16	1 Pt. 12	1 Qt. 12	34 Gal.	1 Gal. 6
Weight Case, Lbs Per Can		21 1.20	42 2.15	42	84 7.80

\*Add 80c per gallon to above prices for these colors.

# AUTO TOP DRESSING

#### PIONEER

For use in refinishing automobile tops and side curtains, producing a jet black gloss finish that is waterproof and pleasing in appearance. Dries hard over night and will not crack or peel.

Size Cans	16 Pt.	1 Pt.	1 Qt.
Cans in Case	16	12	12
Weight Case, Lbs	15	23	45
	80.55	. 90	1.60

# STOVE PIPE ENAMEL

#### PIONEER.



Primarily adapted for stove pipes, iron heaters, gas stoves, furnaces and any interior metal surface to be finished into a high gloss black surface. It stands heat well and will not crack, scale or rub off.

Size Cans	16 Pt.	1 Pt.	1 Qt.
Cans in Case	16	12	12
Weight Case, Lbs	14	21	42
Per Can	80.35	. 45	. 65

# STOVE ENAMEL

# PIONEER HEAT RESISTING

Especially recommended for use where a high quality finish is desired on surfaces that become very hot. It dries with a semi-gloss finish that will stand hard wear and high heats. Being quite waterproof, it can be washed or cleaned without marring the finish in any manner.

Size Cans	16 Pt.	1 Pt.	1 Qt.	12 Gal.	1 Gal.
Cans in Case	16	12	12	6	6
Weight Case, Lbs	14	21	4.2	4.2	84
Per Can	80.40	. 60	1.05	1.80	3.20

# NEV-A-LAC BRUSHING LACQUER



Will dry to handle in thirty minutes and is an excellent finish for furniture, toys, doors, floors and most any surface, interior or exterior.

When necessary to thin, use only Lacquer Thinner,

nothing else.
Furnished in White, Black, Clear and twelve bright, attractive shades.

Size Cans	16 Pt.	1 Pt.	1 Qt.
Cans in Case	16	12	12
Weight Case, Lbs	12	20	35
All Colors and Clear	\$0.80	1.30	2.30
Lacquer Thinner	70		

Color Cards Furnished on Request.

# COLORS IN OIL

PIONEER STRICTLY PURE



Have been recognized for over fifty years as the standard for purity, uniformity, strength and fineness of grinding.

#### KEYSTONE

Extended about one-third and ground in pure linseed oil.

In 1 Pound Cans		
	Pioneer	Keystone
Lamp Black Per Can,	80.93	. 85
Burnt Umber	.64	. 53
Raw UmberPer Can,	.64	.53
Burnt Sienna	.72	.60
Raw Sienna	.72	.60
Chrome GreensPer Can,	68	.57
Chrome YellowsPer Can,	.96	. 85
French Ochre	. 45	. 45
Venetian Red	. 45	. 45
Ivory Drop Black Per Can,	.77	. 64
Vandyke Brown Per Can,	.68	.57
Golden Ochre Per Can,	. 45	.43
Indian RedPer Can,		. 64
Tuscan Red	.96	. 83
American Vermilion Per Can,	1.07	.93
Rose Pink		.93
Rose Lake	1.07	. 93
Graining Colors		
Prussian Blue Per Can,		1.24
Ultramarine BluePer Can,	. 99	. 85
24 Cans in a Case		
In ½ Pound Can	s	
	Pioneer	Keystone
Prussian Blue	\$0.73	. 64
Ultramarine Blue Per Can,	.53	.47
24 Cans in a Case		
In ¼ Pound Can	s	
	Pioneer	Keystone
Prussian BluePer Can,	\$0.39	. 35
Ultramarine Blue Per Can,		. 25

48 Cans in a Case.

Note—5 Pound Cans, \$0.02; 12½ and 25 Pound Cans, \$0.04 Less Per Pound than One Pound Cans.

# DISTEMPER COLORS

#### PIONEER

High Grade Colors Ground in Water, used to a large extent in Graining Colors.

			I	In Glass Ja					a	ars						

Size Jars, Lbs	1
Jars in Case	24
Raw Umber Per Jar,	\$0.45
Burnt UmberPer Jar,	.45
Raw SiennaPer Jar,	.48
Burnt Sienna	.48
Light OakPer Jar,	.48
Dark OakPer Jar,	.48
Vandyke Brown	.48
Lamp BlackPer Jar,	.48
Drop BlackPer Jar,	. 45

# DRY COLORS

A complete line of Dry Colors is available at all times.

Prices on Application

# LIQUID WOOD FILLER

#### PIONEER

For use on light woods of close grain such as pine, poplar, gum and birch. It produces a hard, non-porous surface that will hold up succeeding coats of varnish.

Size Cans	1 Pt.	1 Qt.	14 Gal.	1 Gal.
Cans in Case	12	12	6	6
Weight Case, Lbs	15	30	30	60
Per Can	\$0.60	1.00	1.80	3.20

# PASTE HARD WOOD FILLER

#### PIONEER

Manufactured from the best grades of material known. It produces an exceedingly smooth, level surface on open grained woods and can be varnished over in a way that will prove most desirable.

When reduced and used on open grained woods, it should be wiped off before the varnish is applied.

#### Colors:

Light Oak.	Oak.	Gol	den Oal	k.
Size Cans, Lbs	 1	5	121/2	25
Cans in Case	 24	6	4	1
Per Pound	 \$0.40	.38	.36	. 35

# KRAK FILLER

#### PIONEER

"Pioneer" Krak Filler is very similar to putty and it is used to fill up cracks in floors and the woodwork before refinishing with paint or varnish. It is much superior to putty in that it dries harder and is not so susceptible to shrinking.

Size Cans, Lbs	1	5	1236	25
Cans in Case	24	6	4	1
Per Pound	\$0.40	.37	. 36	. 36

# JAPAN DRYERS

#### PIONEER

#### House Painters

	12 12 15 30 .55 .90	% Gal. 6 30 1.55	1 Gal. 6 60 2.70
--	---------------------------	---------------------------	---------------------------

#### Black Japan

	A Print II	outrem			
Size, Cans Cans in Case	1/2 Pt.	1 Pt.	1 Qt.	14 Gal.	1 Gal.
Weight Case, Lbs	10	15	30	30	60
Per Can		.50	. 75	1.30	9 15



# VARNISHES

#### PIONEER

Each "Pioneer" Varnish is made for the particular purpose it is offered for and sold on a strict guarantee of satisfaction to the user. It is a quality product in every respect.

#### Packing and Weights of All Varnishes

Size Cans ½ Pt.	. 1 Pt.	1 Qt.
Cans in Case 16	12	12
Wt. Case, Lbs. 10	15	3.0
Size Cans Cans in Case	½ Gal. 6	1 Gal. 6
Weight Case, Lbs	3.0	60

Pale Auto Rubbing

		e auto m			
Size Cans	12 Pt.	1 Pt.	1 Qt.	16 Gal.	1 Gal.
Per Can		1.55	2.90	5.55	10.70
	100000000000000000000000000000000000000			0.00	10.70
	Pale	Auto Fi			
Size Cans	½ Pt.	1 Pt.	1 Qt.	½ Gal.	1 Gal.
Per Can	\$0.90	1.55	2.90	5.55	10.70
		All Purp	ose		
Size Cans	16 Pr	1 Pt.	1 Qt.	1/2 Gal.	1 Gal.
Per Can	\$0.70	1.10	1.95	3.70	
rei Can		ble Exter		0.10	7.00
Ola- Come				2/ 0.2	
Size Cans	12 Pt.	1 Pt.	1 Qt.	34 Gal.	
Per Can	\$0.70	1.10	1.95	3.70	7.00
	Dura	ble Interi	ior Spar		
Size Cans	16 Pt.	1 Pt.	1 Qt.	34 Gal.	1 Gal.
Per Can	\$0.70	1.10	1.95	3.70	7.00
		ht Interio		300,000	2070-2017
Size Cans		1 Pt.	1 Qt.	16 Gal.	1 Gal.
Per Can	\$0.70	1.10	1.95	3.70	7.00
rer can	40.70			3.70	1.00
		1 Floor V	arnish		
Size Cans		1 Pt.	1 Qt.	16 Gal.	1 Gal.
Per Can	\$0.60	1.00	1.80	3.40	6.40
	Lin	noleum Va	arnish		
Size Cans		1 Pt.	1 Qt.	1/2 Gal.	1 Gal.
Per Can				3.40	6.40
	40.00	1.00 Flat Varn	ich		
Cia- Cana	1/2 Pt.	1 Pt.	1 Qt.	1/2 Gal.	1 Gal.
Size Cans					
Per Can	\$0.60	1.00	1.80	3.40	6.40
		Elastic Co	ach		
Size Cans		1 Pt.	1 Qt.	14 Gal.	
Per Can	\$0.55	.90	1.40	2.70	4.80
	S	pecial Int	erior		
Size Cans	16 Pt.	1 Pt.	1 Qt.	36 Gal.	1 Gal.
Per Can	80.55	.90	1.40	2.70	4.80
Ter ountries	P	atavia Da			
Size Cans		1 Pt.	1 Qt.	14 Gal.	1 Gal.
				3.95	7.50
Per Can	\$0.70	1.15	2.10	0.00	1.00
	Rubb	ing and I	olishing		
Size Cans	1/2 Pt.	1 Pt.	1 Qt.	16 Gal.	1 Gal.
Per Can	80.70	1.15	2.10	3.95	7.50
	Ha	ard Drying	g Seat		
Size Cans	1/2 Pt.	1 Pt.	1 Qt.	36 Gal.	1 Gal.
Per Can		1.15	2.10	3.95	7.50
rei Can	т.	ard Oil F		0000000	0.575.00
CI		1 Pt.	1 Qt.	16 Gal.	1 Gal.
Size Cans	72 Pt.	1 1.	1 Qt.		4.50
Per Can	\$0.55	.80	1.35	2.50	4.50
		.80 No. 1 Cor 1 Pt.	ach		
Size Cans	16 Pt.	1 Pt.	1 Qt.	16 Gal.	1 Gal.
Per Can	80.40	. 60	1.10	1.95	3.40
	N	o. 1 Furn	iture		
Size Cans	16 Pt.	1 Pt.	1 Qt.	36 Gal.	1 Gal.
		. 60	1.10	1.95	3.40
Per Can	Tone	erial Fur	miture	2.100	
a. a	1/ The	eriai rui	1.Ot	16 Gal.	1 Gal.
Size Cans		1 Pt.	1 Qt.		3.20
Per Can	\$0.40	.60	1.00	1.80	0.20
		neer" Asp			
Size Cans	16 Pt.	1 Pt.	1 Qt.	14 Gal.	1 Gal.
Per Can		. 55	. 90	1.55	2.70
	No. 1	Black A			
Size Cans		1 Pt.	1 Qt.	14 Gal.	1 Gal.
Don Con		.40	. 70	1.10	1.75
Per Can	\$0.35				
	1/ T	ronzing L		36 Gal.	1 Gal.
Size Cans		1 Pt.	1 Qt.		
Per Can	\$0.35	.55	.90	1.55	2.70
		oof Bronz		d	
Size Cans	1/2 Pt.	1 Pt.	1 Qt.	1/2 Gal.	
Per Can		.70	1.15	2.10	3.75
	- North Control				

# COLORED VARNISH

PIONEER



"Pioneer" Colored Varnish produces a stained and varnished effect with one combination and is greatly desired for renewing old work, floors and furniture, as well as for finishing new work of any nature.

Being transparent it permits the grain of new work to show, as it does in case of old work that has been finished with a clear

varnish or stain.

In finishing old work, it should be borne in mind that, because the colored varnish is transparent, a shade should be chosen as near the color of the old work as possible.

Where the color of the old work is to be changed, Ground Color should be used first.

		CONTRACTOR OF			
Clear	Gol	den Oak	77		
Dark Oak	Lig	ht Oak	W		
Dark Mahogar				40060	
Size Cans	16 Pt.	1 Pt.	1 Qt.	36 Gal.	1 Gal.
Cans in Case.	16	12	12	6	6
Wt. Case, Lbs.	10	15	3.0	3.0	60
Per Can	\$0.60	1.10	1.90	3.55	6.65

Color Cards Furnished on Request

# VARNISH REMOVER

PIONEER

Size Cans.... ½ Pt. 1 Pt. 1 Qt. ½ Gal. 1 Gal. Per Can.... \$0.50 .75 1.30 2.15 4.00

# VARNISH FLOOR PAINT



Made to be walked on, in short, it is a combination of the highest grade colors and a hard-drying varnish that will stand up under the most severe usage on interior or exterior floors. It is likewise suitable for interior walls, woodwork, radiators, furniture, porch furniture or similar wood, metal or plaster surfaces.

#### Colors

Dark Oak Mah Light Oak Dus Walnut	ogany t	Print of	ad ate	
Size Cans Cans in Case Weight Case, Lbs Per Can	12 20	1 Qt. 12 40 1.40	36 Gal. 6 40 2.65	1 Gal. 6 80 5.00

Color Cards Furnished on Request

# FLAT GROUND COLOR

Furnished under both the "Pioneer" and "Keystone" labels and is used under Oil Stain and Colored Varnish on old work.

It produces a light tan or yellow color, dries very nicely over night and gives an excellent surface on which to grain with Oil Stain Graining Color.

		PIONEE	R		
Size Cans	16 Pt.	1 Pt.	1 Qt.	16 Gal.	1 Gal.
Cans in Case.	16	12	12	6	6
Wt. Case, Lbs.	15	23	4.5	45	90
Per Can	\$0.50	. 75	1.35	2.40	4.55
		KEYSTO:	NE		
Size Cans	1/2 Pt.	1 Pt.	1 Qt.	16 Gal.	1 Gal.
Cans in Case.		12	12	6	6
Wt. Case, Lbs.	15	23	4.5	4.5	90
Per Can		. 65	1.15	2.10	3.80

# STUCCO TONE

#### PIONEER

The most desirable coating that can be secured for decorating and damp-proofing cement, concrete, brick, stucco or other masonry surfaces above the ground. Penetrating deep into the pores of the surface, it prevents the absorption of water and thereby keeps the masonry surface from breaking down.

Furnished in nine shades which dry to a beautiful eggshell finish.

#### Colors

No.	143-Bedford Gray	No.	147-Buff
No.	144-Portland Gray	No.	148-Brown
No.	145-Concrete Gray	No.	141-Tile Red
No.	146-Cream	No.	142-Green
		White	

Size Packages	1 Gal. Can	5 Gal, Can	1 Bbl.
Packages in Case	6	1	
Weight Per Case, Lbs	110	90	935
Per Gallon	\$5.00	4.85	4.45

Color Cards Furnished on Request.

# SASH BLACK

#### PIONEER

A black finish primarily for use on window sash and frames. Made for exterior use on a spar varnish base that insures real durability under all weather conditions.

Size Cans	16 Pt.	1 Pt.	1 Qt.	14 Gal.	1 Gal.
Cans in Case	16	12	12	6	6
Weight Case, Lbs	15	23	45	45	90
Per Can	\$0.50	.80	1.45	2.75	5.20

# WIRE SCREEN PAINT

#### PIONEER.

Made especially for window screens, preventing the wire from rusting and forming a weatherproof coat for the wood. Dries very hard and, while heavy enough to give real protection, it will not clog the mesh.

Size Cans	14 Pt-	1 Pt.	1 Qt.	16 Gal.	1 Gal.
Cans in Case	16	12	12	6	6
Weight Case, Lbs	15	23	4.5	4.5	90
Black Per Can,	80.40	. 60	1.00	1.85	3.35
GreenPer Can,	. 50	.75	1.35	2.40	4.45

# WALL SIZE

#### PIONEER

A clear, hard-drying varnish sizing to be used under Wall Tone for producing a sealed surface that is greatly desired. It can be mixed with Wall Tone and applied over plaster walls, old paint or wall paper and produces an excellent foundation on which to apply Wall Tone.

Size Cans	1 Qt.	14 Gal.	1 Gal.
Cans in Case	12	6	6
Weight Per Case, Lbs	3.0	3.0	60
Per Can	\$0.95	1.75	3.20

# THE NEVIN QUALITY LINE IS COMPLETE

There is a special paint for every surface. We are prepared to furnish in any quantity just the right product for any purpose

# PURE WHITE

PIONEER



A paste white ground in linseed oil for interior and exterior painting. Composed of lead, zinc and those other pigments which the manufacturer has found produce the best finishing surfaces.

In	Steel	Cans

		Lbs		25	50	100
Per	Pound		\$			
		Mark	et Price.			

#### AMERICAN

		A	paste	white	ground in	linseed	off,
Size	Cans,	L	bs			1	5
Per	Pound	1				80.24	. 20

# WHITE LEAD

# NEVIN STRICTLY PURE

In Oil

This product is available in the usual sized packages.

Prices on Application.

# GLAZIERS PUTTY

NEVIN "PIONEER" PURE

A strictly pure article of the highest quality.

#### "Keystone"

A putty compound that is giving wonderful satisfaction.

#### Commercial Compound

Sold only in the large sized packages.

#### White Lead

Sold only on special order. Prices on Application.

# SAVABRUSH





Brights Old Dry Brushes Back to Life

No matter how hard the paint may have dried in your old brushes, it can be softened and removed with Sayabrush.

The process is quick, simple and inexpensive.

Savabrush will not harm the brush in any way.

Size Cans	216 Oz.	34 Lb.
Weight Per Case, Lbs	2.5	24 15
Per Can	80.10	. 35

20.40

15.00

# WALL PAINT BRUSHES



 No. R-2163—"Mutual", Black Chinese Bristles
 Bristles
 Vulcan Rubber Cemented, Nickel Plated Ferrule, Polished Handle.
 Polished Handle.
 3
 3½
 4
 4
 4
 4
 4
 4
 4
 6

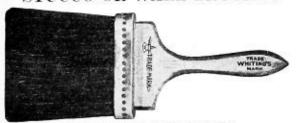
 Width, Inches
 3
 3½
 4
 3½
 4
 3½
 4
 3½
 4
 3½
 6

 Length
 Bristles, Inches
 4
 4¾
 6
 6
 6
 6
 6
 6
 6
 6
 6
 6
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 6
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No. R-352—"Black Dude" All Black Bristles
Vulcan Rubber Cemented, Nickel Plated Ferrule, Polished Handle.
Width, Inches...... 2½ 3 3½ 4 5
Length Bristles, In... 2¼ 2½ 2½ 2½ 2½ 3¼
Weight Dozen, Lbs... 3 4 4½ 4½ 6¾
Per Dozen....... 85.50 7.00 8.60 10.50 17.50

# One-half Dozen in a Box. STUCCO OR WALL BRUSHES



 "Verilo", Black Chinese Bristles

 Vulcanized in Rubber, Leather Bound, Polished Handle.

 Nos.
 30
 35

 Width, Inches
 3½
 4

 Length Bristles, Inches
 4
 4¼

 Weight Dozen, Lbs
 6¼
 7

 Per Dozen
 S40.00
 48.00

 One-half Dozen in a Box.

# FLAT PAINTERS DUSTERS



"Nubian", Black Chinese Bristles and Horsehair Mixed Very Full, Rubber Cemented, Nickel Plated Ferrule, Per Dozen

# VARNISH BRUSHES



No. R-958—Black Chinese Bristles, Soft and Elastic Triple Thick, Chiseled, Brass Bound, Natural Polished Handle.

 Width, Inches
 2
 2½

 Length Bristles, Inches
 2 5½
 2 7½

 Weight Dozen, Lbs
 3 ½
 4 ¼

 Per Dozen
 S12.50
 16.50

 One-half Dozen in a Box.



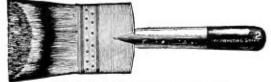
No. R-2165—"XX Nabob", Black Chinese Bristles Double Thick, Chiseled. Nickel Plated Ferrule, Polished Handle.

One Dozen in a Box.



No. R-045—Black Bristles, Double Thick Vulcan Rubber Cemented, Nickel Plated Ferrule, Red Polished Handle.

#### BADGER HAIR FLOWING



 No. 951—Single Thick, Chiseled

 Nickel Plated Ferrules and Handle with Wood Tip.

 Width, Inches
 2

 Weight Dozen, Lbs.
 1½

 Per Dozen
 \$18.25

 One Dozen in a Box.

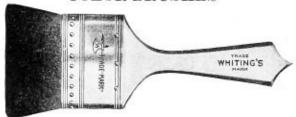
# SASH TOOLS



"Comet", Selected Black Chinese Bristles, Chiseled Nickel Plated Ferrule, Natural Polished Handle.

Nickel Plated Ferr	ule, Nat	urai P	onsned	rianur	0.4
Nos	2	4	6	8	10
Width, Inches	56	34	1	1 1/8	1 76
Length Bristles, Inches.		1 7/8	2	2 7	25
Weight Dozen, Lbs		2	276	2 14	3 %
Per Dozen	83.00	4.00	5.50	7.00	8.00
One I	Dozen in	a Bo	X.		

# COLOR BRUSHES



No. 901-"Krako," Camel Hair, Double Thick, Tin Ferrule Especially Adapted to Coach Painters' Use.

Width, Inches	1	2	3
Weight Per Dozen, Lbs	1	1 1/4	2
Per Dozen	\$5.00	14.00	30.00
One De	zen in a	Box.	

# MARKING BRUSHES



#### Camel Hair, Fairly Stiff

Tin Ferrule, Plain Cedar Handle, Square End.

Nos	1	2	3	4
Weight Per Dozen, Lbs.	1	1	1	1 1/4
Per Dozen	\$1.50	1.75	2.00	2.50
One	Gross in	a Boy		

# PAPER HANGERS SMOOTHING BRUSHES



Two Rows Stiff Black Horse Hair, Wire Drawn

One-half Dozen in a Carton.

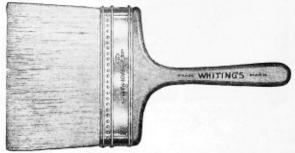
Per Dozen No. 6-12 in. Wide, Bristles 1% in. Long, Weight Per Dozen 7 Lbs......\$14.00



Black Bristle, Metal Ferrule

Width, Inches	8
Length Bristles, Inches 218	3 70
Weight Per Dozen, Lbs 8 1/4	10
Per Dozen	14.00
One-half Dozen in a Box.	

# KALSOMINE BRUSHES



"Atlantic," White Bristles, Metal Ferrule Per Dozen No. 660-6 in. Wide, Bristles 3 1/4 in. Long, Weight Per Dozen 10 Lbs......\$30.00 One-half Dozen in a Box.

# ROOFING BRUSHES



"B. B." All Black Bristles, Mixed Quality, Round Knots, Steel Ferrules

Per Dozen No. 36-4 Knots, 8 in. Wide, Bristles 3 7 in. Long, Weight Per Dozen 111/4 Lbs......\$36.00 One-quarter Dozen in a Box.

# FLOOR WAXING BRUSHES

Stiff Gray Fibre Brush

Aluminum Finished Casting with Felt Guard or Bumper, Varnished Wood Handle.

Part



Each No. 200-Brush Part 1 in. Long, 8 % x4 % in., Weight Each 15 Lbs...... Open Stock.

# IF ITS AUTOMOBILE **ACCESSORIES**

WE HAVE IT

Large Line Shown in Our 500 Page Automobile Accessory Catalogue

F

# METAL POLISH

BLUE RIBBON CREAM



#### In Screw Top Tin Cans

Size Cans	34 Pt.	16 Pt.	1 Pt.
Cans in Case	7.2	36	24
Weight Per Case, Lbs	29	29	3.4
Per Dozen	\$1.80	3.00	5.40
Size Cans	1 Qt.	14 Gal.	1 Gal.
Cans in Case	24	12	6
Weight Per Case, Lbs	57	5.9	58
Per Dozen	\$9.60	13.60	22.40
A			Land.

A cream polish for use on any metal, or metal parts; particularly well adapted for the polishing of brass, copper and nickel.

Requires less polish and less effort to obtain a mirrorlike brilliancy, and the lasting quality of the luster given makes frequent polishing unnecessary.

#### SOLARINE



Cannot be equaled for polishing all kinds of metals, such as gold, silver, brass, nickel, copper, bronze, zinc, aluminum, tin, etc. Absolutely harmless to all metals.

Nos	0	1	2	
Size Cans	1/2 Pt.	1/2 Pt.	1 Pt.	
Cans in Case		72	36	
Wt. Case, Lbs	47	53	54	
Per Dozen.	\$2.00	3.50	6.00	
Nos	3	4	5	
Size Cans	1 Qt.	1/2 Gal.	1 Gal.	
Cans in Case	12	6	6	
Wt. Case. Lbs		36	68	
Per Dozen	\$10.00	18.80	33.00	

#### A-1

#### The One Perfect Metal Polish

Will shine gold, silver, platinum or nickel as well as brass, copper or aluminum. Will not scratch the most highly polished surface.

Easily used, only the least amount of rubbing required to bring a most brilliant luster that lasts.

Perfect emulsion prevents caking in bottom of the can.

Size Cans	1 Pt.	1 Qt.	1 Gal.
Cans in Case		12	6
Wt. Case, Lbs		38	68
Per Dozen		7.00	24.00



#### WINTERTON PASTE



A quick cleaner, a rapid finisher, free from acid or gritty properties.

# For Steel Per Dozen 1 Pound Can—25 Cans in a Case......\$6.00

For Brass
Per Dozen
Pound Can—25 Cans
in a Case......\$6.00

# NICKEL POLISH

BLUE RIBBON CREAM



A quality product in every way for cleaning and polishing fine nickel parts and trimmings.

It gives a pokish that is remarkable not only for its clear brilliancy but also for its splendid lasting qualities.

Size Cans	34 Pt.	1 Pt-	1 Qt.
Cans in Case	3.6	24	24
Weight Per Case, Lbs	29	34	57
Per Dozen	\$3.00	5.40	9.60

# PREPARED WAX

JOHNSON'S PASTE

#### For Floors and Woodwork

Gives perfect results over any finish. It imparts a hard, dry, velvety polish which is impervious to water, dust, scratches, heel marks, finger prints, etc.

For polishing floors of all kinds, wood, linoleum, tile, marble, etc.

Never becomes soft or sticky in the hottest weather.

# ONISON'S LIMITSON'S LIMITSON'S LIMITSON'S

#### In Friction Top Tin Cans

Size Cans, Lbs	3/2	1	4
Cans in Case		100	100
Weight Per Case, Lbs	60	115	115
Per Can	\$0.50	. 85	2.40

#### SOWISON'S SOWISON'S Commenced for Commenced for

#### JOHNSON'S LIQUID

The ideal Furniture Polish. Imparts a hard, dry, gloss-like lustre which will not gather dust and lint or show finger prints, covers up surface mars and prevents checking. Johnson's Liquid Wax takes all the drudgery from dusting, adds years to the beauty and life of varnish, easy to apply and polish.

The ideal Automobile Polish, acts as a buffer between the varnish and the elements.

Size Bottle	16 Pt.	1 Pt.	1 Ot.
Bottles in Case	48	48	24
Weight Per Case, Lbs	35	65	60
Per Bottle	\$0.50	. 75	1.40

# GULFOIL

There is a definite need for "Gulfoll" everywhere as a lubricant because it is "wear insurance" wherever it penetrates. It cleans and polishes furniture and woodwork, removing both dirt and grime, and produces a beautiful luster.

Both tarnish and rust on metal surfaces can be quickly and easily removed with "Gulfoil."

In	Handy	Flat	Tin	Oil	Cans	
	7-11-15-16				Per	Dozen
nlfoil-	3 Oz	Can.				\$3.60

One Dozen in a Box.



THREE IN ONE OIL



Three-In-One Oil Lubricates, Cleanses, Polishes and Prevents Rust

Has no equal for sewing machines, guns, bicycles, typewriters and other mechanism.



No. 3.

Nos. 1 to 8.

# FIRE EXTINGUISHERS

#### PYRENE

Pyrene Fire Extinguishers are the safest and most efficient type for electrical and all fires starting in oil, gasoline, shellac, paint or other highly inflammable substances. Water only spreads oil fires and is dangerous to use on an electrical fire.

When Pyrene is thrown onto a blaze, the heat of the fire transforms the liquid into a heavy, non-poisonous gas blanket which extinguishes the fire by cutting off the air sup-

ply.

The lightness and ease of operation of Pyrene extinguishers by women and children commend it to anyone for home protection.

Being adopted as standard fire protection for incipient fires by large railroads, factories, etc.

There is within the container a manually operated double-acting pump which throws a continuous stream. Brass Finish, with Black Enameled Brackets



PYRENE LIQUID

Pyrene Liquid will not injure delicate fabrics or sensitive machinery. Can be kept in unheated buildings or in exposed places as it does not freeze even at 50 degrees below zero,



#### GUARDENE

Guardene Fire Extinguishers embody all the latest improvements in soda and acid machines. They are powerful enough to handle a free burning fire in its early stages yet light and compact enough to permit extremely quick action.

To use the extinguisher it is simply turned upside down. The stream can be shut off by turning the extinguisher right side up again. Will throw a stream 40 feet.

Made of cold rolled copper, burnished outside and heavily tin plated inside. Tested to 350 pounds pressure.

# GLASS CUTTERS

GENUINE RED DEVIL



Hand Honed and Tested Cutting Wheel

No. 024—4% in. Long, Polished Steel Head, Red Enameled Iron Handle, Weight Per Dozen 1 Lb.\$2.20 One in a Box, One Dozen in a Carton.

#### LENOX



Extra Hard, Hand Honed Cutting Wheel

Per Dozen Lenox-Polished Head, Blue Enameled Handle, with

Red Tip, Weight Per Dozen % Lb.......\$2.20 Cuts more glass and cuts it easier, well finished and fully guaranteed against defective materials or workmanship.

One in a Box, One Dozen in a Display Carton.

#### G-P TURRET HEAD



No. 10-Extra Cutter Wheels, for No. 1 Cutter..... .66

#### UNIVERSAL DIAMOND



With Guide Wheel to Regulate Pressure

#### RED DEVIL CIRCULAR



Red Enameled Base, Polished Rod

metal base with rubber mat to prevent slipping. Adjustable head, steel rod graduated in inches to sixteenths, cuts glass clean and accurate.

One in a box.



Will Cut Circles of Any Size from 2 to 12 in. Diameter

No. 478—Graduated Beam, Rubber Base, Honed and Tested Cutter Wheel, Weight Each ½ Lb.....\$1.30 One in a Carton.

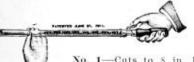
# GAUGE GLASS CUTTERS CHESTERTON



Nickel Plated

The sliding lever can be placed close to work and thus more power is obtained. The steel cutting wheel can be used much longer than in any other cutter.

Chesterton-8 % in, Long, Steel Cutting Wheel, Graduated Spring Lever, Weight Each 1/2 Lb. . . . . . . \$2.00 Extra Cutter Wheels.... One in a Carton.



WILKINS IMPROVED Nickeled Beam, Rubber Finish Handle

No. 1-Cuts to 8 in. Lengths, Weight Each 6 Oz..... . \$2.00 One in a Box with Extra Cutter Wheel. Each

Extra Cutter Wheels-Ground and Tested ...... \$0.15

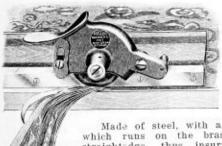
# STRAIGHTEDGES

RULED TRIMMER OR KNIFE EDGE



No. 4-Brass Bound, Selected Seasoned Stock, Graduated Length, Feet ...... 7 8 Weight Each, Lbs.... 3.16 \$5.35 6.50 Each ..... Open Stock.

# WALL PAPER TRIMMERS



MODEL D

For Use with No. 4 Straightedge

Made of steel, with a steel clip guide which runs on the brass track of the straightedge, thus insuring a perfectly straight cut. This Trimmer can be used only in conjunction with a straightedge,

Trims the selvage of wall paper six times as fast as can be done with shear or knife.

Model D-Trimmer Only, 5 in. Long. Weight Each 

# TRIMMER OUTFITS

No. 4-0-Consists of a No. 4 Straightedge, a Model "D" Trimmer and a Strip of Zinc.

The strip of zinc is 3 in, wide and the length of the straightedge and is used to lay under the paper on the cutting table.

Length Straightedge, Feet ..... 3 1/2 Weight Per Outfit, Lbs..... 416 \$9.50 10.20 10.85 Per Outfit ..... Open Stock.

# CASING AND CORNER KNIVES

Frames are Highly Nickeled and Polished, Wheels are Tempered Steel, Polished and Ground



Large Maple Handle Per Dozen No. 6-11/2 in. Wheel, Smooth Edge, Weight Per Dozen About 1% Lbs. . . One-half Dozen in a Box.



Polished Large Maple Handle Per Dozen No. 02-11/2 in. Wheel, Serrated Edge, Weight Per 

# PAPER HANGERS KNIVES



High Grade Steel Round Point Blade, Well Tempered and Ground

No. 2-3 % in. Long, 1 % in. Wide, Weight Per Dozen About 1 Lb. .... One Dozen in a Box.

# SEAM ROLLERS

RIDGELITE

Roller Made of a Special Compound, Knurled to Prevent Flashing or Polishing the Seam.



Large Maple Handle Per Dozen No. 1-14 in. Oval Face, 6 in. Long, Weight Per Dozen About 2 1/4 Lbs......\$8.50 One-balf Dozen in a Box.

#### MAPLE



Maple Roller, Friction Polished No. 11-1 in. Flat Face, Polished Steel Frame, Friction Polished Maple Handle, Weight Per Dozen About 2 Lbs.... One-half Dozen in a Box.

#### SMOOTHING ROLLERS

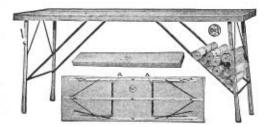


Hard Maple Roller

Per Dozen No. 3-9 in., Nickel Plated Steel Frame, Large Polished Maple Handle, Wt. Per Dozen 7½ Lbs.....\$7.50



# FOLDING PASTE TABLES



No. 314-Air Dried Bass Wood Top and Legs

33 in. High, 22 in. Wide Opened, 11 in. Wide Closed; Space in Side for Straight Edge and Hand Tools; All Steel Braces; Flaring Legs Prevent Creeping.

Length, Feet	6	7	8
Weight Each, Lbs		23	27
Each	\$8.50	9.20	9.60

The steel cross braces make the tables much more rigid at top. They also enable the end braces to be attached to them and permit the surplus paper to be put on the braces without weakening the table.

Open Stock.

# STEP LADDERS

CHALLENGE

# Straight Grained, Tough Eastern White Ash Front Standards

The Back Standards are of Clear Eastern Spruce, Clean White Basswood Steps. Every Step is Bolted and Clamped so as to Make a Break Almost an Impossibility. Exceedingly Strong and Durable Yet Comparatively Light in Weight. With Pail Shelf.

The state of the s					
Length, Feet	3	4	5	6	7
Weight Each, Lbs	10 1/2	14	1736	21	24 1/2
Per Foot	\$1.10	1.10	1.10	1.10	1.10
Length, Feet		8	10	12	14
Weight Each, Lbs		28	35	42	49
Per Foot		\$1.10	1.10	1.50	1.50

3 to 8 Feet, Two; 10 and 12 Foot, One in a Bundle.

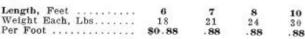
#### GOSHEN "A"

# Good Grade Stock, with Shelf

Full Bolted with a Bolt Supporting Each Step, Wide Top Riveted to Legs and Risers, Steel Angle Bound Braces, Boyer New Faultless Lock.

2 % x % in. Risers, 1 % x % in. Back Legs, 7x % in. Top, 3 % x % in. Steps.

Length, Feet	4	5
Weight Each, Lbs	12	15
Per Foot	\$0.88	.88



Open Stock.

# STEP LADDERS

SPECIAL FULL RODDED



# Best Bright Clear Stock

Steps are Gained Into Sides or Risers. Iron Rods Under All Steps Held Securely in Place by Plates at Each End.

Back Legs are Hung on Galvanized Wrought Iron Ears or Brackets and Well Braced.

Shelf Supported on Arms Riveted to Back Legs. Steel Locks Securely Riveted to Risers and Back Legs.

Length, Feet	4	5	6
Weight Each, Lbs	10	13	- 15
Per Foot	\$0.45	. 45	. 45
Length, Feet	7	8	10
Weight Each, Lbs	17 1/2	20	25
Per Foot	\$0.45	.45	.45
- Open S	tock.		

# STRAIGHT SINGLE LADDERS

# High Grade Stock, Hardwood Rungs

Rungs are "Shouldered", Driven Clear Through and Securely Nailed.

1	Wide Spread at Bottom.	
	Length, Feet 12	14
ŀ	Weight Each, Lbs 21	24 1/2
	Per Foot \$0.30	. 30
	Length, Feet	18
ŀ	Weight Each, Lbs 28	31 1/2
	Per Foot \$0.30	.35
	Length, Feet	20
	Weight Each, Lbs	35
1	Per Foot	\$0.35
1	Open Stock.	

7.000-000-00

# EXTENSION LADDERS

# AUTOMATIC

# Clear Stock, Selected Hardwood Rungs

Each Rung is "Shouldered", Driven Clear Through and Nailed. Malleable Iron Castings and Pressed Steel Metal Parts, Wide Spread at Bottom, with Rope and Pulley.

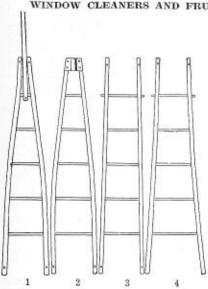
22	24	26	28
50	54	60	63
\$0.45	.45	.45	.45
30	32	34	36
67 1/2	74	7.6	80
\$0.45	. 45	.50	.50
	38	40	42
	85 14	-	90
	\$0.50	.50	.60
	22 50 \$0.45	22 24 50 54 80.45 .45 30 32 67½ 74 \$0.45 .45 38 85½	22 24 26 50 54 60 80.45 .45 .45 30 32 34 67½ 74 76 \$0.45 .45 .50 38 40 85¼ 88

A strong, safe Ladder, that releases on a catch at any height desired. Always work when rope is pulled. Open Stock.



# LADDERS

# WINDOW CLEANERS AND FRUIT PICKERS



Clear Spruce, Selected Rungs

6 1/4 ft. long, 15 in. wide over all at point of connection, %x2% in. side rails.

Window cleaner's section is brought close together and provided with hollow piece to fit on corner of window sash and door jambs.

Fruit picker's section is fitted with a 2 foot straight extension.

			200				er Se	ection
No.	1-Top	Fruit	Packer's	Section.	Weight	Per	Sec-	
								3.50
No.	2-Top	Wind	ow Clean	er's Sec	tion, We	eight	Per	
	Section	8 Lb	8					3.50
No			r Middle					

4—Bottom or Flare Section, Weight Per Sec-

tion 7 Lbs...... 3.25 Open Stock.

PAINTERS TRESTLES



RICH EXTENSION

Selected Stock

The length of the trestle is exclusive of the extension part.

The extension part of each trestle is the same length as the trestle itself.

6 8 10 39 52 65 78 91 104 \$0.60 ,60 . 65 .65 . 65 .60 Open Stock.

STAGING HOOKS

High Carbon Steel, Black Japanned

Length, Feet ......

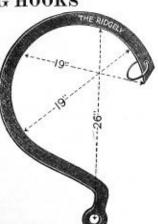
Weight Each, Lbs....

Per Foot .....

Per Pair

No. 94-29 in. Long, Steel 2 in. Wide by 1/2 in Thick, One Pair Will Support a Load of 1500 Lbs. with Absolute Safety, Weight Per Pair 40 Lbs.....\$8.40

Open Stock.



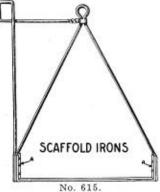
# PAINTERS SCAFFOLDS



Clear Norway Spruce Side Rails

Selected Hardwood Rounds, Seats Nailed to Rounds, Iron Brace Rods at Each End. No- 1-16 ft. Long, Weight Each 80 Lbs...... \$ 9.00 No. 2-20 ft. Long, Weight Each 100 Lbs...... 14.00

# SCAFFOLD IRONS



No. 615-With Safety Back

A piece of 2x4 slipped in the loops at top prevents danger of falling off backward. Made of the best ½ in. round steel with 1½x½ in. steel bottom.

Will hold a down weight of 2000 pounds.

Width, Inches... 24½ Per Pair..... \$12.00 Width, Inches... 28 1/2 Per Pair..... \$12.00

Weight Per Pair 25 Pounds.

> 2814 11.70

No. 6151/2-Without Safety Back Otherwise Same as No. 615.

Width, Inches ..... 24 1/2 Per Pair ..... \$11.00

Weight Per Pair About 25 Pounds.

Open Stock.

# LADDER JACKS

"SAFETY"



Four Point Suspension On Side Rails

Not dependent on the strength of the rungs. The strain is entirely on the side

Consequently, this is the safest ladder jack made.

In Reverse Position.

Strong, rigid, safe and com-An alloy steel bolt forms an unbreakable hinge.

High Grade Steel, Black Japanned

Per Pair Safety Ladder Jack-Wt. Per Pair 23 Lbs....\$4.50

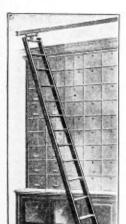
Six Pairs in a Case.



# ROLLING LADDERS

COBURN PATTERN

STYLE "A"



#### Will Run on Curved or Straight Track

The Heavy, Ball Bearing Top Carriage consists of a Steel Bar and two Drop Forged Steel Pendants which allow the carriage to swivel.

The Track is the Original Co-burn Round Trough inclosed track, with forged steel track brackets spaced not over 6 ft.

The Bottom Rolls are Coburn Rubwood Wheels, made with layers of laminated wood impregnated with rubber with a heavy rubber tread as part of the wheel. Wheel is steel bushed.

#### Solid Straight Sides, Natural Wood Finish

Sides 4 1/2 in. Wide, Treads 5 1/2 in. Wide, Ladder 14 in. Wide over all, 5½ in. Pitch to a Foot in Height, Well Braced, Strong and Rigid.

#### Hard Pine-Complete up to 16 ft. Long, Weight Each Complete About 65 Lbs.......Each, \$20.00 Oak—Complete up to 16 ft. Long, Weight Each Complete About 67 Lbs..........Each, 24.00 Extra Length-Over 16 ft., Add........ Per Foot, 1.00 No. 1 Track-Coburn, with Brackets . . . Per Foot, . 25 Ladder Carriage-With Bolts ..... Each, 8.00 Bottom Rolls-With Brackets ..... Per Pair, 4.00 Bottom Rolls-Rubwood Wheels Only . . . Per Pair, 2.50 Adjustable Side Shelves..... .. Each. 2.00 .20 Pine Ceiling Strips......Per Foot, Oak Ceiling Strips......Per Foot, .30 Open Stock.

#### STYLE "B"

#### Will Run on Curved or Straight Track

The Carriage has slides which allow the Ladder to be pushed back against the shelving into a vertical position out of the way when not in use.

The Track is straight grained hardwood accurately turned to 1 % in. round, polished and oiled.

The Track Brackets are Steel or, occasionally heavy Cast Iron.

The Bottom Rolls are Coburn Rubwood Wheels as described above.

#### Straight or Bent, Natural Wood Finish

Sides 3 in. Wide, Treads 4 in. Wide, Ladder 16 in. Wide Over All, 21/2 in. Pitch to a Foot in Height, Strengthened and Braced with Steel Rods and Brackets.



Hard Pine—Straight Ladder, Complete, Weight Each About 48 Lbs Each.	\$18.00
Oak-Straight Ladder, Complete, Weight Each	Carles Concerns
About 50 LbsEach.	22.00
Bent Ladder-Pine or Oak, AddEach.	2.00
Track-Wood, with Brackets, End Stops. Per Foot,	. 20
Track Brackets	.15
Ladder Carriage—Complete Each,	6.00
Bottom Rolls-Complete with BracketsPer Pair,	4.00
Bottom Rolls-Rubwood Wheels, Only Per Pair.	2.50
Adjustable Side Shelves Each,	2.00
Open Stock.	

# ROLLING LADDERS COBURN PATTERN



#### STYLE "C"

For use when there are obstructions or conditions of the floor which will not permit a ladder to run over it.

Track is Tubular Iron which must be securely fastened, preferably to uprights to secure sufficient strength.

Top Carriage is the same as furnished with Style "B."

The Ladder is of the same material and workmanship as Style "B."

Instead of Bottom Rolls, the Style "C" is furnished with Rubber Covered Fender Rolls that roll against edge of counter ledge.

#### Bent Ladder

Hard Pinc-Complete, Weight Each 45 Lbs., Each,	\$18.00
Oak-Complete, Weight Each 48 Lbs Each.	22.00
Track-Tubular Iron, with Brackets Per Foot,	. 30
Ladder Carriage-Complete Each,	6.00
Fender Rolls-Complete with Brackets . Per Pair.	2.00
Fender Rolls-Rubber Covered Rolls Only . Per Pr	
Adjustable Side ShelvesEach,	2.00
Open Stock.	

#### STYLE "D"

For use in Vaults, File Rooms and all small rooms where it is desirable to transfer the ladder to different runs of track in the same room.

The top fittings allow the ladder to be easily removed from the track. By having tracks properly arranged, all parts of shelving are easily accessible by moving ladder from one track to the other.

High Grade Ladder, Wood Track same as with Style "B," Coburn Rubwood Bottom Rolls, same as with Style "B."

#### Straight or Bent Ladder

Hard Pine - Straight Ladder, Complete, Weight Each 48 Lbs... Each, \$12.00

Oak-Straight Ladder, Complete, Weight Each 50 Lbs. . . . . . . . . Each. 16.00



Bent Ladders Dine on Oak 111 P. 1	
Bent Ladders-Pine or Oak, AddEach,	\$2.00
Track-With Brackets and End Stop Per Foot,	.20
Track Brackets Each	.20
Top Hooks Por Pair	1.00
Bottom Rolls-Complete with Brackets Per Pair	4 00
Bottom Rolls—Rubwood Wheels Only Per Pair	2 50
Adjustable Side Shelves Each,	2.00

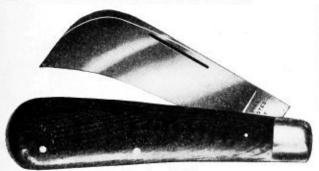
Open Stock. Note 1-Write for Order Blanks, Fill in all Measurements Accurately.

Note 2-Allow 12 in. Clear Space above Track for top of Ladders Style "B." "C" and "D."

Note 3-Straight Ladders are recommended wherever distance from counter ledge to where track is located is 4 ft, or more and ledge does not exceed 12 in. in width.

Note 4-For Style "C" give Exact Distance Center to Center of Shelf Uprights and, if Track is to be attached to Uprights, give Thickness of same.

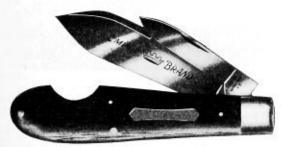
Made of the finest Pocket Cutlery Steel, high in Carbon, making a blade which will cut and hold its edge. Blades are of the finest temper possible to be obtained.



Pruning Knife

One Pruning Blade, Glazed Finish, Steel Lined, Steel Bolster.

Per Dozen



Jack, Two Blades. Large Spear and Pen, Glazed Finish, Brass Lined, Nickel Bolster.

Per Dozen



Stabber, Two Blades, Large Spear and Pen, Glazed Finish, Steel Lined, Steel Bolster,



Two Blades, Glazed Finish Blades, Brass Lined, Steel Bolster.

	Per Dozen
No.	06334-EBEV-Large Saber Clip and Pen, Ebony
	Handle, 3 % in. Long
No.	062-S-Plain Spear and Pen, Stag Handle 12.00
	063-E-Plain Spear and Pen. Ebony Handle 12.00

Weight Per Dozen 21/2 Pounds.



Jack, Two Blades, Large Spear and Pen, Glazed Finish, Brass Lined, Nickel Bolster and Cap.



Two Blades, Large Broad Spear and Pen, Polished Mark Side, Brass Lined, Nickel Bolster and Cap.

							Per Dozen
No.	464-8-Stag	Handle.	3 34	in.	Long.	Weight	Per
	Dozen 3 Lbs						\$17.00

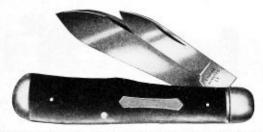


Cruckle Jack, Two Blades, Large Spear and Pen, Large Blade Polished One Side, Brass Lined, Nickel Bolster and Cap.

No. 2240-8 —Stag Handle, 3 1/8 in. Long......\$14.00 No. 2240-SCH—Same as Above, with Chain..... 15.00 Weight Per Dozen 1 1/4 and 2 Pounds.



Small Bullhead, Two Blades, Large Spear and Pen, Glazed Finish, Brass Lined, Nickel Bolster and Cap.



Stabber, Norfolk Front, Two Blades, Large Spear and Pen, Large Blade Polished Mark Side, Brass Lined, Steel Bolster and Cap.

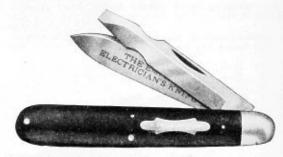


Two Blades, Large Spear and Pen, Glazed Finish, Brass Lined. Nickel Bolster and Cap.

No. 062½-S—Stag Handle, 3 % in. Long, Weight
Per Dozen 2 ½ Lbs......\$13.00



Regulator, Two Blades, Large Spear and Pen, Large Blade Polished One Side, Brass Lined, Nickel Bolster and Cap.



Lock-Back Electricians', Two Blades, Large Spear and Screw Driver, Glazed Finish, Brass Lined, Nickel Bolster. Per Dozen No. 372-E—Ebony Handle, 3 % in. Long, Weight



Large Bullhead, Two Blades, Large Spear and Pen, Glazed Finish, Brass Lined, Steel Bolster and Cap.



Sleeveboard, Three Blades, Large Clip, Sheep and Pen, Large Blade Polished One Side, Brass Lined, Nickel Bolsters.

All Above, One-half Dozen in a Box



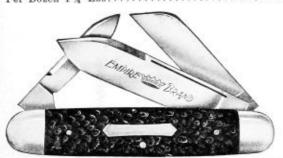
Carbo, Three Blades, Large Spear and Two Pens, Large Blade Polished One Side, Brass Lined, Nickel Silver Tips. Per Dozen

No. 3209-S-Stag Handle, 3 1/4 in. Long, Weight Per 



California Jack, Three Blades, Large and Small Clip and Pen, Large Blade Polished One Side, Brass Lined, Nickel Bolsters.

No. 369 34 -S-Stag Handle, 3 % in. Long, Weight Per Dozen 1 % Lbs......\$21.50



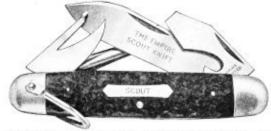
Carpenters', Three Blades, Spear, Sheepfoot and Pen, Spear Blade Polished One Side, Brass Lined, Nickel Bolsters. Per Dozen

No. 957-S-Stag Handle, 3 % in. Long, Weight Per .....\$20.50 Dozen 2 % Lbs.



Scout Jr., Four Blades, Sheepfoot, Punch, Can Opener, Screwdriver and Cap-Lifter, Blade Polished One Side, Brass Lined, Nickel Bolsters and Shackle. Per Dozen

No. 6-BS-Stag Handle, 3% in. Long, Weight Per .....\$21.00 Dozen 2 1/4 Lbs.....



Regulation Boy Scout, Four Blades, Large Spear, Punch, Can Opener, Screwdriver and Cap Lifter, Spear, Blade Polished One Side, Brass Lined, Nickel Bolsters and Shackle. Per Dozen

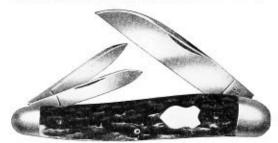
No. 4-BS-Stag Handle, 3 % in. Long, Weight Per Dozen 3 Lbs.....\$22.00



Tourist or Picnic, Four Blades, Spear Polished One Side, Flexible File, Combined Screwdriver and Cap Lifter, Cork Screw, Brass Lined, Nickel Bolster.

Per Dozen

No. 378-SF-Stag Handle, 3 1/8 in. Long, Weight Per Dozen 1% Lbs..... ....\$35.00



Wharncliffe, Three Blades, Large Pocket Half Polished, and Two Pens, Brass Lined, Nickel Bolsters.

Per Dozen

No. 362-GS-Genuine Stag Handle, 3 % in. Long, 



Senator, Three Blades, Spear, Pen and Nail File, Spear Polished One Side, Brass Lined Nickel Bolsters.

No. 929-S-Stag Handle, 3 1/2 in. Long, Weight Per Dozen 1 1/4 Lbs......\$20.00

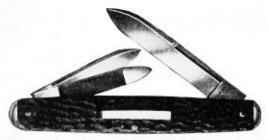




Oval Senator, Three Blades, Large Spear Polished One Side, Pen and Nail File, Brass Lined, Nickel Bolsters. Per Dozen No. 926-P—Pearl Handle, 3 ¼ in. Long, Weight Per

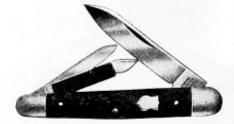
Dozen 1¼ Lbs......\$36.00





Senator, Three Blades, Large Spear Polished One Side, Pen and Nail File, Brass Lined, Nickel Silver Tips.

Weight Per Dozen 1 1/4 Pounds.



Sleeveboard, Three Blades, Large Spear Polished One Side, Pen and Nail File, Brass Lined, Nickel Bolsters. Per Dozen No. 3273-S —Stag Handle, 2% in. Long.......\$19.50

No. 3273-9 — Pearl Handle with Bail, 2% in. Long. 32.00

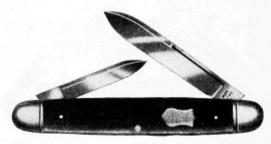
Weight Per Dozen 1 Pound.



Oval Senator, Three Blades, Large Spear Polished One Side, Pen and Nail File, Brass Lined, Nickel Silver Tips. Per Dozen

No. 940-S — Stag Handle, 3¼ in, Long......\$23.00 No. 940¾-S—Four Blades, Large Spear, Two Pens and Nail File, Otherwise Same as No. 940-S... 27.00

Weight Per Dozen 11/4 Pounds.



Senator, Two Blades, Large Spear Polished One Side, and Pen, Brass Lined, Nickel Bolsters,



Wharncliffe, Two Blades, Large Blade Polished One Side, and Pen, Brass Lined, Nickel Silver Bolsters.



Small Balloon, Two Blades, Large Spear and Pen, Spear Blade Polished One Side, Brass Lined, Nickel Bolsters.

No. 299-S-Stag Handle, 3 in, Long, Weight Per Dozen 1 Lb......\$13.00



Sleeve board, Two Blades, Large Spear and Pen. Spear Blade Polished One Side, Brass Lined, Nickel Bolsters.

Per Dozen No. 2203-E-Ebony Handle, 3 % in. Long........\$13.50 No. 2203-S - Stag Handle 3 % in. Long . . . . . . . . . 13.50

Weight Per Dozen 11/4 Pounds.



Congress, Two Blades, Large Sheepfoot and Pen, Glazed Finish, Brass Lined, Steel Bolsters.

No. 656-S-Stag Handle, 31/2 in. Long, Weight Per Dozen 1 Lb......\$13.50



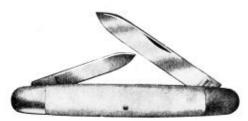
Medium Senator, Two Blades, Large Spear and Pen, Spear Blade Polished One Side, Brass Lined, Nickel Bolsters. Per Dozen

No. 781-S-Stag Handle, 3 in, Long, Weight Per Dozen 1 Lb......\$13.00



Oval Senator, Two Blades, Large Spear and Pen, Spear Blade Polished One Side, Brass Lined, Nickel Silver Tips.

Per Dozen No. 940 1/2 - S - Stag Handle, 3 1/4 in. Long, Weight 



Oval Senator, Two Blades, Large Spear and Nail File, Spear Blade Polished One Side and Etched Stainless, Nickel Silver Lining and Bolsters.

Per Dozen No. 9S25SX-Stag Handle, Shielded, 3 1/4 in. Long. 820.50 No. 9S25SX-Pearl Handle, No Shield . . . . . . . . . . . . 36.00

Weight Per Dozen 1 Pound.



Sleeveboard, Two Blades, Large Spear and Pen. Spear Blade Polished One Side, Brass Lined, Nickel Bolsters.

No. 2273-P-Pearl Handle, 2 % in. Long...... 22.50

Weight Per Dozen 1 Pound.



Senator, Two Blades, Large Spear and Pen, Spear Blade Polished One Side, Brass Lined, Nickel Silver Tips.

No. 322-S-Stag Handle, 3 in. Long, Weight Per 

All Above, One-half Dozen in a Box.



Senator, Two Blades, Large Spear and Pen, Spear Blade Polished One Side, Stainless Steel Blades, Spring and Handle.



Senator, Two Blades, Large Spear and Pen, Spear Blade Polished One Side.



Pumpkin Seed, Two Blades, Large Spear and Pen, Spear Blade Polished One Side, Brass Lined, Nickel Bolsters.

 Blade Polished One Side, Brass Lined, Nickel Bolsters.
 Per Dozen

 No. 650-S — Stag Handle, 3 in. Long.
 \$12.50

 No. 941-P—Pearl Handle, 3 in. Long.
 20.50

Weight Per Dozen % Pound.



Senator, Two Blades, Large Spear and Pen, Spear Blade Polished One Side, Brass Lined, Nickel Bolsters.



Senator, Two Biades, Large Spear and Pen, Spear Blade Glazed, Steel Lined, Nickel Bolsters.

Per Dozen



Roly Poly, Two Blades, Large Spear and Pen, Large Blade Polished One Side, Brass Lined, Nickel Bolsters. Per Dozen



Oval Lobster, Two Blades, Large Spear and Nail Pick, Blade Polished One Side, Nickel Silver Lined, with Shackle. Per Dozen

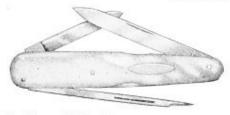


Sleeveboard, Three Blades, Large Spear, Pen and Nail Pick, Large Blade Polished One Side, Nickel Silver Lined, with Shackle.



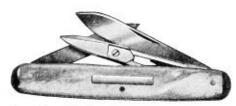
Carbo Lobster, Three Blades, Large Spear, Pen and Nail Pick, Large Blade Polished One Side, Nickel Silver Lined, with Shackle,

All Above, One-half Dozen in a Box.



Lobster, Three Blades, Large Spear, Pen and Nail Pick. Large Blade Polished One Side, Nickel Silver Lined.

Weight Per Dozen 1 Pound.



Senator, Three Blades, Large Spear, Flexible File and Scissors, Blade Polished One Side, Nickel Silver Lined, Nickel Silver Tips, Scale Milled.

No. 515-P — Pearl Handle, 3 % in. Long...........\$56.00 No. 515-GS—Genuine Stag Handle, 3 % in. Long... 46.00

Weight Per Dozen 11/4 Pounds.

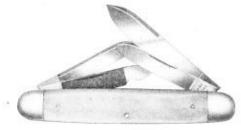


Senator, Four Blades, Large Spear, Two Pens and Nail File, all full Crocus Polished, Nickel Silver Lined, Milled Scales, Nickel Silver Tips.



Senator, Four Blades, Large Spear, Two Pens and Nail File, Large Blade Polished One Side, Brass Lined, Nickel Silver Tips.

Weight Per Dozen 1 Pound.



Senator, Four Blades, Large Spear, Two Pens and Nail File, Large Blade Polished One Side, Brass Lined, Nickel Bolsters.

								er Do:	
No.	781 ¾ -P-	-Pearl	Handle,	3	in.	Long		 . \$33	50
	781%-S-								

Weight Per Dozen 1 Pound.



Senator, Four Blades, Large Spear, Two Pens and Nail File, full Crocus Polished, Nickel Silver Lined, Nickel Silver Tips, Milled Scales,



Senator, Four Blades, Large Spear, Two Pens and Nail File, full Crocus Polished, Nickel Silver Lined, Nickel Silver Tips, Milled Scales.

No. 754-GS—Genuine Stag Handle, 3½ in. Long,
Weight Per Dozen 1¼ Lbs......\$44.00



Senator, Four Blades, Large Spear, Two Pens and Nail File, full Crocus Polished, Nickel Silver Lined, Nickel Silver Tips, Milled Scales.

Per Dozen

# POCKET KNIVES

WOSTENHOLM I-XL



Two Blades, Large Spear and Pen. Glazed Finish, Brass Lined, German Silver Bolsters.

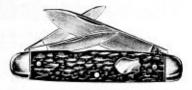
Per Dozen

No. 2019-A-Imitation Stag Handle, 314 in. Long, 



Two Stainless Steel Blades, Large Spear and Pen. Glazed Finish, Brass Lined, German Silver Bolsters.

Per Dozen No. B-41-D-Imitation Stag Handle, 3 in. Long, 



Three Blades, Large Spear and Two Pens, Glazed Finish, Brass Lined, German Silver Bolsters.

Per Dozen No. B-155-Imitation Stag Handle, 31/2 in. Long, 



Three Blades, Large Spear, Pen and Nail File, Polished. Brass Lined, German Silver Tips.

Per Dozen

No. 2143—Imitation Stag Handle, 3 in, Long, Weight Per Dozen 12 Oz.......\$54.00 No. 2144-Stag Handle, 31/4 in. Long, Weight Per Dozen 18 Oz...... 58.00



Four Blades, Large Spear, Two Pens and Nail File, Polished, Brass Lined, German Silver Tips.

Per Dozen No. 2146-Imitation Stag Handle, 31/4 in. Long...860.00 

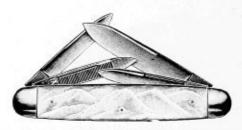
# POCKET KNIVES

WOSTENHOLM I-XL

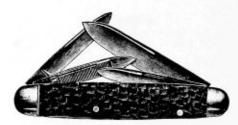


Congress, Four Blades, Large Sheepfoot, Two Pens and Nail File, Glazed Finish, Brass Lined, Iron Hollow Bolsters.

No. 2160-Imitation Stag Handle, 3% in. Long, 



Four Blades, Large Spear, Two Pens and Nail File, Polished Blades, Brass Lined, German Silver Bolsters.



Four Blades, Large Spear, Two Pens and Nail File, Glazed Finish, Brass Lined, German Silver Bolsters.

Per Dozen

No. 17039-Imitation Stag Handle, 3% in. Long, 



Four Blades, Large Spear, Two Pens and Nail Files, Polished Blades, Brass Lined, German Silver Tips.

Per Dozen

No. 2199-Pearl Handle, 3 in. Long, Weight Per Dozen 17 Oz......886.00

All Above, One-half Dozen in a Box.

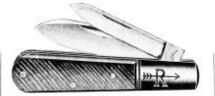
# BARLOW POCKET KNIVES

RUSSELL



One Blade, Spear Point, Glazed, Steel Lined. Heavy Steel Bo'ster. Per Dozen

No. 60-Brown Bone Handle, 3 % in. Long, Weight Per Dozen 1 % Pounds ..... \$5.25



Two Blades, Large Spear and Pen. Glazed, Steel Lined, Heavy Steel Bol-Per Dozen

No. 62-Brown Bone Handle, 3 % in, Long, Weight Per Dozen 



Two Blades, Large Clip and Pen, Glazed, Steel Lined, Heavy Steel Bolster.

Per Dozen

No. 66-Brown Bone Handle, 3% in, Long, Weight Per Dozen 2 1/4 Lbs. . . . . . . . . . . . . . . . . . 87 . 50



One Blade, Clip Point, Glazed, Brass Lined, Heavy Steel Bolster. Per Dozen

No. 6000-Easy Opener, Brown Bone Handle, 5 in. 



Fishermans, One Clip Point Blade with Saw Back, Glazed, Brass Lined, Steel Bolster. Per Dozen No. 6-Lock Back Brown Bone Handle, 5 in. Long. with Pocket Case, Weight Per Dozen 3 % Lbs. . \$18.00

# RACE KNIVES



For Woodworkers, Plasterers, Electricians, etc. For marking and grooving. Per Dozen No. 135-Redwood Handle, 3 1/2 in. Long, Steel Lined,

.....\$18.00 Steel Bolster One-half Dozen in a Box.

# POCKET KNIFE PURSES



Fine Kid Leather, Snap Button Fastener

2 2 . Nos. 3 3 14 Length, Inches..... \$1.00 1.00 1.00 1.00 Per Dozen ..... Open Stock.

# SAFETY RAZOR BLADES

GEM DOUBLE LIFE BLADES



Ingeniously prepared and tempered steel, ground with minute and exacting care.

The edge of each blade is protected, packed individually and hermetically sealed in wax paper-covered packages.

Per Package

6-6 Blades in a Package, 24 Packages in a Carton ......\$0.42

# SAFETY RAZOR BLADES

DURHAM DUPLEX



Made of the finest Swedish Steel, Hardened, Oil Tempered, Hollow Ground, Honed, Stropped and Hand inspected. Each Package Hermetically Sealed in Waxed Paper.

Per Package

No. 5D-5 Blades in a Package (10 Shaving Edges) \$0.50

# EVER-READY RADIO STEEL BLADES



The cutting edge is one ten-thousands of an inch Each blade prothick. tected by paraffine card-board and wrapped in cli-mate proof paper in a seal locked wrapper.

Per Package

-5 Blades in a Package, 24 Packages in a Carton .....

# SAFETY RAZORS

DURHAM DUPLEX



Each No. 1 - Standard Set, Nickel Plated Razor with Grained White Celluloid Handle. Safety Guard and Package of Three Double-Edged Hollow Ground Blades, All in Grained White Celluloid Case ... \$1.00

# GEM SAFETY RAZORS

The Original Safety Razor. The Adjustment is entirely Automatic.



Standard

Triple Nickel Plated Brass Gem Frame, Handle and Blade Box, with Six Gem Double Life Blades.

# EVER-READY SAFETY RAZORS



Triple Nickel Plated Brass Ever-Ready Frame, Handle and Blade Box, with Five Ever-Ready Radio Steel Blades.



Triple Nickel Plated Brass Ever-Ready Frame, Handle and Blade Box, with Five Ever-Ready Radio Steel Blades.

# VALET AUTO-STROP SAFETY RAZORS

The only Automatic Stropping Safety Razor on the market. It shaves, Strops automatically and cleans without removing the Blade from the holder.



Triple Silver Plated Self-stroping Razor, 10 Auto-Strop Blades, specially prepared selected Leather Strop, Silver Plated Strop Container, Chased Silver Plated Blade Box.

Each



#### Metal Case Outfit

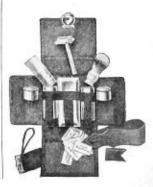
Triple Silver Plated Self-stropping Razor, 10 Auto-Strop Blades, specially prepared selected Leather Strop, Chased Silver Plated Strop Container and Blade Box.



Metal Case Outfit

Triple Silver Plated Self-stropping Razor, 10 Auto-Strop Blades, specially prepared selected Leather Strop, Chased Silver Plated Strop Container and Blade Box.

New Yorker—Nickel Plated Metal Case with Embossed Cover, Purple Silk and Velvet Lined....\$5.00



# Leather Case Outfit

Contains 1 Londoner Metal Case Outfit as described above, showing Brush in Silver Plated Tube, Shaving Stick in Silver Plated Tube.

# SAFETY RAZOR BLADES

#### VALET AUTO-STROP



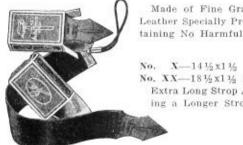
Carefully made, finished and tested, each in Moistureproof Wrapper.

Per Package No. 10-10 Blades in a Package, 12 Packages in a Carton . . . . . . . \$1.00

No. 5-5 Blades in a Package, 24 Packages in a Carton.....

# SAFETY RAZOR STROPS

#### VALET AUTO-STROP



Made of Fine Grade Selected Leather Specially Prepared, Containing No Harmful Substances.

No. X-14 1/2 x1 1/2 in . . . . \$0.50 No. XX-18 1/2 x1 1/2 in., an Extra Long Strop Affording a Longer Stroke ... 1.00

# GILLETTE SAFETY RAZORS

#### NEW IMPROVED

The leading features of the New Improved Gillette are: The Fulcrum Shoulder, Overhanging Cap, Adjustable Short Flexure, Channeled Guard and Micrometer Precision. The finest shaving instrument ever produced. The distinctive knurling is used exclusively on the New Improved Gillette Razor,



New Standard - Solid Metal Heavily Silver Plated Razor, 10 Double Edged Gillette Blades, Metal Blade Box, All in Purple Velvet and Satin Lined Genuine Leather Covered Case . . . . \$5.00

Each



Bostonian-Solid Metal Heavily Silver Plated Razor, 10 Double Edge Gillette Blades, Metal Blade Box, All in Purple Velvet and Satin Lined Nickel Plated Metal Case, Opening of Cover Automatically Raises Tray Containing Razor and 

Each

Each



Tuckaway-Solid Metal Heavily Silver Plated Razor, 10 Double Edged Gillette Blades, Metal Blade Box, All in Purple Velvet and Satin Lined Heavily Silver Plated Case, a Small Com-

Razor, Blade Box and Case. 6.00



Each

Traveler-Solid Metal Heavily Silver Plated Razor, 10 Double Edged Gillette Edged Gillette Blades, Metal Blade Box, Shaving Brush and Stick Gillette Shaving Soap in Metal Container, All in Purple Velvet and Satin Lined Genuine Leather

#### GILLETTE BLADES



Made from Special Formula Steel have two cutting edges. Each Blade is placed in individual envelope and put up in a sealed package. Per Package No. 10-10 Blades in a Package,

10 Packages in a Carton . . . \$1.00 No. 5-5 Blades in a Package, 20 Packages in a Carton . .



Each Big Fellow-Extra Heavy Solid Metal Heavily Silver Plated Razor, 10 Double Edged Gillette Blades, Metal Blade Box, All in Selected Natural Finish Gumwood Case ... \$5.00

# RAZORS

HENCKELS TWIN BRAND



Special Concave, Extra Fine Polish, File Tang, Flat Black Rubber Handle.

Per Dozen No. 16-% in. Square Point Blades......\$54.00



Half Hollow Ground, Flat Black Rubber Handle. Per Dozen No. 18% - % in Square Point Blade . . . . . . . . . . \$42.00 No. 1834 - 34 in. Square Point Blade ..... 42.00



Full Concave, File Tang, Fancy Oval Black Rubber

Per Dozen No. 81-5 in. Round Point Blade ...... ..... \$54.00

# TORREY HIGHEST QUALITY



Full Concaved, Brilliant Crocus Polished, Oval Black Rubber Handle.

Per Dozen No. 136 % - % in. Round Point Blade . . . . . . . . \$48.00 No. 13634 % in. Round Point Blade ..... 48.00



Full Concaved, Swage Back, Selected Pearl Tang, Full Crocus Polished, Flat Black Rubber Handle.

Per Dozen 

All Above, One-half Dozen in a Box.

#### RAZORS

RED-INJUN



Special Full Hamburg Ground, File Tang, Full Polished, Oval Black Rubber Handle. Embodies perfection in the art of razor grinding and honing.

Per Dozen No. 100-1/2 in. Square Point Blade......\$48.00 No. 101-% in. Square Point Blade ..... 48.00

One-half Dozen in a Box.

# SAFETY RAZOR STROPPERS

TWINPLEX

The Mechanism is enclosed in a Metal Dust Proof Case.



Operation-(See transparent view). The two rollers revolve in opposite directions, each stropping a different edge. At each complete revolution the blade automatically turns over and the rollers strop the other side, first a stroke on one side, then on the other, just as the Barber does.





No. G200.

No. D650.

#### Standard Model

Each

No. G200-For Gillette Blades, in Highly Polished Hinged Nickel Case, Purple Satin Lined, Size 3x3 

Fitting Artificial Leather Case, Full Grained, Purple Lined, Gold Stamping ..... 5.00

One in a Box.



#### Black Beauty

Like the Regular Twin-plex Model Except the Finish, Rust-resisting Black Enamel Metal Case, Nickel Plated Ends, in Gold Stamped Purple Imitation Leather Case.

## RAZOR STROPS

#### CARBORUNDUM

Carborundum Razor Strops are made from the finest of selected leather, hand buffed and finished.

The sharpening sides of some of these strops are corrugated and into the corrugations and into the texture of the leather extremely fine hand-washed carborundum powder is worked.



No. 457—2x22 in., Medium Weight Selected Horsehide, Plain Handle, Brass Eyelet Holder.....\$15.00 One Dozen in a Box.



Per Dozen

1.11 111111111111

No. 440—2 ¼ x26 in., Heavy Genuine Horsehide, Embossed Leather Ordinary Handle, Gilt Brass Split Ring Swivel.....\$24.00 One-half Dozen in a Box.





Per Dozen

### PRESTO



Nos. 200B and 250B.

	Selected Pig Skin Leather	Each
	200B—Private Style Safety Razor Size, 2x19 in., Double, One for Honing and One for Finishing, Nickel Plated Metal Loop and Handle	\$2.50
	200A—Barbers' Style, Safety Razor Size, 2x2 ½ in., Same as No. 200B but without Handles	2.50
	250B—Private Style, 2½x22 in., One for Honing and One for Finishing, Nickel Plated Metal Loop and Handle	3.00
No.	250A—Barbers' Style, Double, 2 1/4 x 23 1/2 in., Same as No. 250B but without Handles	3.00

## RAZOR HONES

BELGIAN



#### No. 111—Half Fine Grade

One in Individual Telescope Box.

#### PIKE HANDIHONE



Can be Used Wet or Dry

#### PIKE SWATY



A Composition Hone

### CARBORUNDUM



Made of Extra Fine Hand-Washed Carborundum Powder Unexcelled for Fast Cutting Qualities and for Producing a Keen, Lasting Edge.

Nos. . . . . . 105 101A 103 \*106 102 Size, Inches. . . 8x2½x¾ 5x2x½ 4x2x½ 4x2x½ 4x1½x½ Each . . . . . 82.75 1.35 1.15 1.00 .75 \*A Dry Hone.

No. 105, Three; Balance, Six in a Box.

#### PIKE STROP-HONE



Has Two Sides, One a
Hone the other a Strop.
Hone is used Dry. no
Water, Oil or Lather required. Strop is held
scientifically taut and
cannot Sag. A few
strokes will edge any
razor. Per Dozen

Each

# SAFETY RAZOR BLADE HOLDER



# LATHER BRUSHES

RUBBERSET

The Butt End of the Bristles are imbedded in a Solid Head of Soft Rubber and Vulcanized to the Hardness of Flint.



Ebonized Wood Handle

No. 415—2 in, Selected Black China Bristles, Nickel Plated Steel Ferrule, Length Over All 4% in.. \$3.60



Ebonized Wood Handle

No. 218—2 in, Blended Badger Hair, Alberite Black Ferrule, Length Over All 4½ in......\$10.50



Celluloid White Handle



Alberite White Handle

No. 221—1% in. Blended Badger Hair, Alberite Black Ferrule, Length Over All 4½ in......\$13.50



Alberite White Handle



Alberite White Handle

No. 230—2 1/8 in. Imported Badger Hair, Alberite
Black Ferrule, Length Over All 4 % in.......\$20.00
All Above, One-half Dozen in a Box.

# TOILET CLIPPERS



Tempered Tool Steel Blades, Concealed Spring, Finely Finished and Nickel Plated. A Small Light Weight Clipper.

One in a Box.

#### AMERICAN GENTLEMAN



A wonderful hair clipper for family use. Clips fast, stays sharp for years. Fits the hand. Has easy action. Adjustable tension. A better hair clipper can not be had at any price.

One in an Attractive Box.

#### B. & S. BRESSANT



Nickel Plated

Tool Steel Corrugated Bottom Plate. 2 in. Wide, Uniform Tension, Winged Nut, Indestructible Spiral Spring. Plates are Interchangeable for All Sizes.

# HORSE CLIPPERS



Anti-Friction Bearings, Nickel Plated, Polished Satin Wood Handles, Nickel Plated Metal Ferrules.

Ball Bearing—Length Over All 11 in.....\$4.00

One in a Box.

# SHEARS

WISS STRAIGHT TRIMMERS



Crucible Steel Inlaid Blades, Hardened and Tempered. Ground and Set for Use.

### Full Nickel Plated

Nos	136 1/2 6 1/2 3 17.50	137 7 3 14 18 . 65	137 ½ 7 ½ 3 ½ 19 . 60
Nos	 138 8 3 74 \$20 . 50	138 ½ 8 ½ 4 21 . 65	139 9 4 1/4 25 . 70

#### Japanned Handles, Nickel Plated Blades

Nos Length, Inches	36 6	6	1/2 1/2		3734 736	88
Per Dozen	\$13.				3 ½ 16.35	
Nos				39 9 4 14	30 10 4 %	32 12 6 1/4
Length Cut, Inches Per Dozen	\$	18.20			26.75	
One-ha	lf Do	zen in	a	Box.		

#### WISS BENT TRIMMERS



Crucible Steel Inlaid Blades, Hardened and Tempered, Ground and Set for Use,

# Full Nickel Plated

Length, Inches

126 36

6 1/2 2 34

6

127

3 1/4

Per Dozen	\$17.60	18.50	19.60
Nos. Length, Inches Length Cut, Inches. Per Dozen	127 1/2 7 1/2 3 3/4	8	8 1/2
Japanned Handles, Nickel	Plated	Blades	14 17 27
Nos	27 1/2 7 1/2 3 3/8	28 8	28 ½ 8 ½ 4 20 . 60
Nos	29 9 4 1/4 \$24 . 25	20 10 5 29,15	$\begin{array}{c} {\bf 22} \\ 12 \\ 6 \ \% \\ {\bf 34} \ . \ {\bf 65} \end{array}$

# WISS CARPET OR UPHOLSTERERS



Crucible Steel Inlaid Blades, Fitted with Steel Screw and Nut. Japanned Handles, Polished Blades. Each

No. 4-IS-Length of Cut 6 1/4 in., Full Length 12 in. . \$5.50 One in a Box.

## SHEARS

WISS CARPET OR UPHOLSTERERS



#### With Raised Blade

Crucible Steel Inlaid Blades, Fitted with Steel Screw and Nut, Polished Blades, Japanned Handles.

No. 31/2 N.L.S .- Length 12 1/2 in., Length of Cut 6 1/4 inches ..... \$6.50

#### WISS TAILORS



### Light Pattern

Crucible Steel Inlaid Blades, Polished, Japanned Handles. 3N 12 1/2 12 1234 6 14 6.34 Length Cut, Inches ..... 6 14 8.25 \$7.00 7.50Each .... One in a Box.

### WISS CANDY



#### Heavy Pattern

Crucible Steel Inlaid Blades, Bent Japanned Handles, Nickel Plated Blades.

No. 121/2 -Length 12 1/2 in., Length of Cut 6 1/8 in. . . \$3.40

#### WISS GLASS

Crucible Steel Inlaid Blades, Nickel Plated, Japanned Handles.



Per Dozen

No. 11B-Blunt Points, Length 11 in., Length of 



Per Dozen

No. 11-SP-Sharp Points, Length 11 in., Length of 

Finish.

### SHEARS

### CAST STRAIGHT TRIMMERS



#### No. 350-Carbonized Metal

Heavily Nickel Plated, Adjusted with Steel Screw, in Anti-rust Paper Pocket.

맛있게 맛있다면서 얼마나 생생하다 아니지 않는데 하네요?			
Length, Inches	6	7	8
Per Dozen	86.00	6.50	7.00

One-half Dozen in a Box.

#### WISS LEATHER OR BELT



#### One Serrated and One Knife Edge

Crucible Steel Inlaid Blades, Polished, Japanned Handles.

Nos	1	2
Length, Inches	9	11
Length of Cut, Inches	3	5 1/2
Per Dozen 8	\$31.50	40.00

### WISS ROACHING OR FETLOCK



Crucible Steel Inlaid Blades

Japanned Trimmer Handles, Polished Curved Blades,
Per Dozen
No. 01—Length 9 in., Length of Cut 4 in........\$31.50

### WISS BANKERS OR PAPERHANGERS



Crucible Steel Inlaid Blades, Hardened and Tempered.

Full	Nickel Plat	ed	
Nos	180	182	184
Length, Inches		12	14
Per Dozen	\$31.75	39.00	49.05

### Japanned Handles, Nickel Plated Blades

Nos	80	82	84
Length, Inches	10	12	14
Length Cut, Inches	5 1/2	7 1/8	9
Per Dozen	\$26.75	32.60	41.30

One-half Dozen in a Box.

### SHEARS

WISS BARBERS



American Pattern, Crucible Steel Inlaid Blades.

#### Full Nickel Plated

Nos	147	147 %	148
2021	1.4.4		1.10
Length, Inches	7	7.36	8
Length Cut. Inches	3 1/8	3 %	3 %
Per Dozen	\$18.50	19.60	20.50

### Japanned Handles, Nickel Plated Blades

Nos	47	47 1/2	48
Length, Inches	7	7.1/2	8
Length Cut. Inches	3 1/8	3 3/8	3 %
Per Dozen	\$15.50	16.35	17.60

One-half Dozen in a Box.



Polished Blades, Nickel Plated Handles, Extra Fine

One-half Dozen in a Box.

#### BOKER BARBERS



#### French Pattern

Best Crucible Steel, Full Polished, Glazed Inside.

Nos	1005/7	1005/736
Length, Inches	7	7 1/2
Per Dozen	\$12.00	12.60
One-half Dozen in a	Pov	

# EDITORS OR DESK SCISSORS



Crucible Steel, Ring Handles, Full Nickel Plated

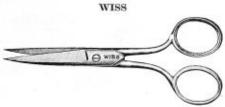
Nos.		,				,						,	_	70	198	199
Length, Inches	2		4	 			4		_			٠.			8	9
Per Dozen			,	1	+	4				-					\$20.50	25.70

#### Japanned Handles, Nickel Plated Blades

									meet Limites	
Nos		.,							98	99
Length, Inches			V.	2.3					S	9
Per Dozen	 525.5		200		×		 ,		817.60	21.65

One-half Dozen in a Box.

### LADIES SCISSORS



#### Oval Pattern

Solid Steel, Sharp Points, Full Nickel Finish.

Nos	763 14	764 1/2	765
Length, Inches	3 1/2	4 1/2	5
Length Cut, Inches	1 1/4	1 %	2
Per Dozen	\$12.00	13.20	13.80
Nos		765 16	766
Length, Inches		5 1/2	6
Length Cut, Inches		2 1/4	2 1/2
Per Dozen		\$14.40	15.00
One-half	Dozen in a	Box.	



Solid Steel, Ring Handles, Full Nickel Plated. 155 155 14 156 Nos. . . . 6 Length, Inches ..... 5 5 1/2 2 % 2 14 Length Cut, Inches..... 2 1/2 Per Dozen ..... \$12.00 12.80 13.20 13.80

One-half Dozen in a Box.

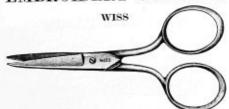


Light Pattern

Solid	Steel.	Full	Nickel	Plated,	Extra	Fine	Finish.
20114	,			214		4 16	8

Nos	814	814 32	815
Length, Inches	4	4 1/2	5
Length Cut, Inches Per Dozen	1 %	2 15.60	2 1/4 16.80
Nos	815 1/2	816	817
Length, Inches	5 1/2	6 2 34	3 1/6
Length Cut, Inches Per Dozen	\$17.40	18.00	21.60
One-half	Dozen in a	a Box.	

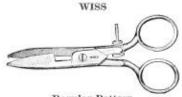
# EMBROIDERY SCISSORS



Solid Steel, Ful	Nickel Plated	Extra Fine	Finish
------------------	---------------	------------	--------

Dorra Dress,	77916 774
Nos	11072
Length Inches	5 72
Toucht Cut Inches	1 74 1 72
Per Dozen	<b>PAG</b> 100
One-half Dozen in a	Box.

# BUTTONHOLE SCISSORS



Regular Pattern

Solid Steel, Japanned Handles, Nickel Plated Blades.
Per Dozen

No. 4—Length 4% in., with Set Screw and Lock Nut, Will Cut Button Holes Up to 1% in......\$15.00 One-half Dozen in a Box.

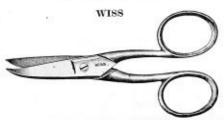
# POCKET SCISSORS



Solid Steel, Full Nickel Plated

Nos	164	164 1/2	165
Length, Inches	4	4 1/2	5
Length Cut, Inches	1 %	2	2 1/4
Per Dozen	\$12.00	12.60	13.20
	Dozen in a	Box.	

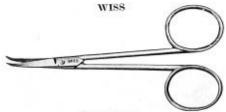
# NAIL SCISSORS



Solid Steel, Curved Blades, Full Nickel Plated

Nos	664
Length Inches	4
Per Dozen \$15.00	18.00
One-half Dozen in a Box	

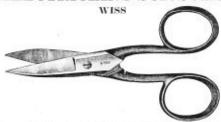
# MANICURE SCISSORS



Solid Steel

					Fine Finish. Per Dozen
No. 573%	—Leng	th 3¾ in. One-half Do	zen in a	Box.	\$16.20

## ELECTRICIANS SCISSORS



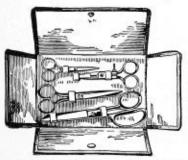
#### Solid Steel, Full Nickel Plated

Specially Hard Tempered Points for Cutting Wire, Insulation and Light Sheet Metal. Has Scraper Edge and File on Back of Blades. Per Dozen

No. 175E—Length 5 in., Cut 1 % in......\$14.55 One-half Dozen in a Box.

# SCISSOR GIFT SETS

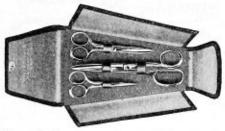
WISS



An exceptionally fine set. Containing a complete assortment of shears and scissors for dressmaking and household use.

### Embossed Gray Leather Case, Lined with Fancy-Color Satin and Plush

No. 4A-Contains One Each, 7 in. Sewing Shear, 5 and 6 in. Ladies Scissors and 3 1/2 in. Embroidery Scissors, Nickel Plated with Gold Plated Han-.....\$10.00



Contains a balanced assortment of Shears and Scissors Selected for Home Dressmaking.

Brown Leather Case Richly Stamped with a Leaf Design, Sand-Color Satin Lining

No. 3A-Contains One Each, 7 in. Household Shear, 5 in. Ladies Scissors and 3 1/2 in. Embroidery Scissors, Nickel Plated with Gold Plated Handles . . . \$7.50



Accordian Case of Brown Pin Leather, Sand-Color Satin Lining Per Set

No. 14-Contains One Each 7 in. Sewing Shear, 5 in. and 6 in. Ladies Scissors and 3 1/2 in. Embroidery Scissors, Highly Nickel Plated ...... \$9.00

## SCISSOR GIFT SETS

WISS

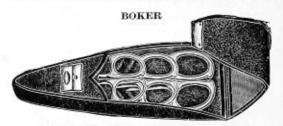


Case is daintily made of genuine leather in three color combinations:

Navy blue with powder blue satin lining, gray leather with royal blue lining and purple leather with gold lining.

Per Set

No. 1-Contains Two Gold Plated Scissors, One 5 in. Ladies and One 31/2 in, Embroidery Scissors. . . \$4.75



Genuine Leather Coffin Shaped Case

Per Set

No. 3001-Blue Leather Case, Velveteen Lining, Contains 2 Crucible Steel Drop Forged Fancy Bow Scissors .... ...\$4.50

No. 3003—Brown Leather Case, Velveteen Lining, Contains 1 Each 3½, 5 and 6 in. Fancy Gold Bow, Crucible Steel Scissors.......... 6.00

### NAIL NIPPERS



Per Dozen

No. 8167—Forged Steel, Knurled Handle, Lock-Catch, Volute Spring, Full Nickel Plated, 41/4 in. Long ..... \$24.00



Per Dozen

No. 6543-Forged Crucible Steel, Tempered Spring, Ground Cutters, Extra Fine Full Nickel Plated, 

### NAIL CLIPPERS



Gem-Length 2 in., High Grade Tool Steel, Two Cutting Jaws are Hardened, Tempered and Ground, Has no Sharp Corners to Wear the Pocket when Closed, Full Nickel Plated ......\$4.00

A Pocket Manicure, it cleans, cuts and files better than a knife or scissors, trims nails nice and even, oval shape, any desired length. Best for removing hang nails.

### TWEEZERS



#### Fine Quality Steel, Nickel Plated

No. 40—414 in. Long, Round Sharp Points......\$4.00
One Dozen on a Card.



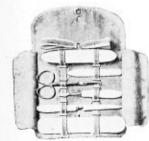
#### Best Quality Splinter Tweezer

No. 225—3 in. Long, Nickel Plated Steel......\$7.50 One Dozen on a Card.



#### Best Quality Dressing Tweezer

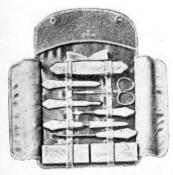
# MANICURE SETS



Lamb Skin Case, Astrachan Grain, Satin Lined

No. 3126 — 6 Piece Set, Contains Sheath with Emery Board, Nail File,

Cuticle Knife, Stick Button-hook and Buffer, Bone Handles......\$3.50



French Ecrase Finished Leather Case Satin Lined

Per Set
No. 26139 — 9 Piece
Set, Contains 2 Boxes
with Nail Cake and
Pumice Cake, Buttonhook, Nail File,
Cuticle Knife, Cleaner, Cuticle Scissors,
Earspoon and Buffer,
Pearl on Amber Handles .......\$8.50



Astrachan Grain Lamb Skin Case, Satin Lined

No. 27107 — 7 Piece
Set, Contains Sheath
with Emery Boards,
Nail File, Cuticle
K n i f e, Cornknife,
Cuticle Scissors, Stick
and Buffer, G o l d
Pearloid Handles...
\$10.00

### MANICURE SETS

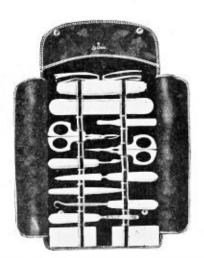


Leaf Grain Lamb Skin Case, Satin Lined



Alligator Grained Leather Case, Satin Lined

No. 12349—9 Piece Set, Contains 2 Boxes with Nail Cake and Pumice Cake, Nail File, Cornknife, Cuticle Knife, Nail Nippers, Cuticle Scissors, Stick and Buffer, Horn Amerith Handles....\$10.50



Leaf Grain Lamb Skin Case, Satin Lined

Per Set

No. 14632—12 Piece Set, Contains 2 Boxes with Nail Cake and Pumice Cake, Buttonhook, Tweezers, Stick, Nail File, Cuticle Knife, Cuticle Scissors, Nail Scissors, Cleaner, Sheath with Emery Boards and Buffer, Ivory Handles.....\$12,00

### BUTCHER KNIVES

RUSSELL PROFESSIONAL



### No. 21012—Improved Cord Wrapped Sure-Grip Handle

#### RUSSELL



#### No. 012B-Beechwood Handle

Hand Forged from Special High Carbon Crucible Steel, Heavy Gauge, Ground and Edged Sharp.

Length, In. 6 7 8 9 10 12 14 Per Dozen .. \$5.75 7.00 8.50 10.50 13.00 17.75 22.50 One-half Dozen in a Box.

#### RUSSELL STAINLESS



#### Cocobolo Handle, Large Brass Rivets

No. 53419—7 in. Stainless Steel Blade.....\$10.50
One-half Dozen in a Box.

# BONING KNIVES

RUSSELL



#### Large Solid Beechwood Handle



#### Extra Large Solid Beechwood Handle

### STICKING KNIVES

RUSSELL



#### Beechwood Handle, Riveted

### SKINNING KNIVES

RUSSELL



### Beechwood Handle, Riveted

Per Dozen

## BUTTER KNIVES

RUSSELL



Cocobolo Handle, Metal Bolster

Per Dozen

No. 58289—6 in. Heavy Gauge Stainless Steel Blade. \$13.50 One-half Dozen in a Box.

### CHEESE KNIVES

RUSSELL



Cocobolo Handle, Brass Rivets

### COOKS KNIVES

RUSSELL



No. 68-French Sabatier Pattern

Hand Forged Special High Carbon Crucible Steel Blade, Solid Ebonwood Handle, Metal Bolster,

 Length Blade Inches
 4
 5
 6
 8

 Per Dozen
 \$11.00
 12.50
 15.00
 20.00

 Length Blade, Inches
 10
 12
 14

 Per Dozen
 \$28.00
 36.00
 44.00

 One-half Dozen in a Box

### BREAD KNIVES

BURNS



Cocobolo Handle, Brass Compression Rivets

The serrated edge cuts with each motion of the hand, producing a clean cut without tearing the bread or causing crumbs. The serrated edge will last for years.

# BREAD KNIVES

#### LIGHTNING



### Ebony Finish Hardwood Handle

The finest cakes can be cut without crumbling, edge can be sharpened on ordinary steel.

Per Dozen

No. 300—9 in., Special Forged Steel Serrated Blade,
Oil Tempered and Polished, Swaged Back, Nickel
Plated Brass Bolster.....\$4.80
One Dozen in a Box.

### SLICERS

#### RUSSELL



#### Round Ebonwood Handle



### "Cooks," Ebonwood Handle



### "Lunch," Cocobolo Handle, Brass Rivets



### Ebonwood Handle, Brass Rivets



"Household," Solid Cocobolo Handle, Brass Rivets
Per Dozen
No. 53189—8 in. Stainless Steel Blade......\$11.50
One-half Dozen in a Box.

# KITCHEN OR PARING KNIVES

#### RUSSELL



### Beechwood Handle

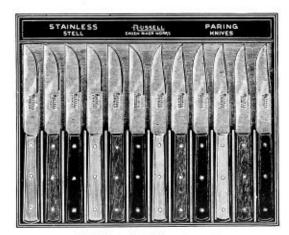


#### Polished Maple Handle

No. 6—3 in. Carbon Steel Blade.......\$2.50
One Dozen in a Box.



### Stainless Steel Assortment



Stainless Steel Assortment

No. 159—Contains 12 Knives, 3 in. Stainless Steel
Blades, Assorted Cocobolo, Ebonwood and Boxwood Handles, Full Tang, in Display Box.....84.20

### GRAPE FRUIT KNIVES RUSSELL



#### Black Enameled Wood Handles

Per Dozen No. 609-Serrated Edge Stainless Crucible Steel Blade .....\$6.00 One Dozen in a Box.



#### Black Enameled Wood Handle

Per Dozen No. 619-Double Edge Curved Stainless Steel Blade. \$5.50 One Dozen in a Box.

### SPATULAS OR PALLET KNIVES RUSSELL



Crucible Steel Blade, Cocobolo Handle, Metal Bolster Length Blade, In. 4 6 8 10 12 Width Blade, In. ¾ 18 1¼ 1½ 1¾ 14 Width Blade, In. . Per Dozen..... \$6.25 8.00 13.00 20.00 25.00 40.00 One-half Dozen in a Box.

## ONE-ARM MAN'S KNIVES RUSSELL



Hard Rubber Handle, with Sole Leather Sheath Per Dozen No. 1479-44 in. Stainless Steel Blade and Fork End ......\$18.00 One-half Dozen in a Box.

### COOKS FORKS RUSSELL



Solid Cocobolo Handle, Brass Rivets Per Dozen No. 5286-Length Over All 121/2 in ...... ....86.30 One-half Dozen in a Box.

# HOUSEHOLD KNIFE SETS

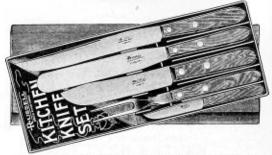


Cocobolo Handles, Nickel Silver Telescope Large Head Rivets, Through Tang. Per Set

No. 1923 1/2 SS-Set Contains 6 Knives, Two 9 in. Slicers, Two 71/2 in. Slicers, and Two 6 in. Butcher Knives, Stainless Steel Blades, in Display Box... \$5.50

# KITCHEN KNIFE SETS

RUSSELL STAINLESS



Solid Ebonwood Handles, Large Brass Rivets

Per Set No. 3059-Set Contains 5 Pieces, One Each 8 in. Slicer, 7 in. Spatula, 6 in. Butcher Knife, Pot Fork and Paring Knife, all with Stainless Steel Blades, in a Box.....\$4.00



#### RUSSELL

#### Ebonwood Handles, Brass Rivets

Per Set No. 300-Set Contains 6 Pieces, one Each 12½ in. Pot Fork, 8 in. Slicer, 6 in. Butcher Knife, 7 in. Spatula, 4 in. Kitchen Knife and Paring Knife, High Grade Polished Steel Blades, Sharpened Ready for Use. \$3.00

### MICA SPLITTING KNIVES DEXTER



Round Burnt Handle

Per Dozen

No. X26327-6 in. Pointed Crucible Steel Blade, Highly Polished, Length Over All 10 in......\$8.00 One Dozen in a Box.

# OYSTER KNIVES



New York Pattern

Per Dozen

No. 153-Solid Steel, 5 in. Half Polished Blade and



Boston Pattern

Per Dozen

No. 155-2 % in. Polished Steel Blade, Whitewood Handle ......\$3.50

One Dozen in a Box.

## SHOE KNIVES

OLD PUT



#### Square Point

Forged Polished Crucible Steel Blade	, Polished	Stained
Handle.		
Nos	3	4
Length Blade, Inches	3 %	3.5%
Per Dozen	\$3.50	3.50
One Dozen in a Box.		

#### RUSSELL



#### Black Wood Handle

No.	421—4 i	n. Forged	Crucible	Steel	Blade,	Per Dozen Bevel
	Point, Po	olished				\$2.40
		One	Dozen in	a Box.		

# ROPE KNIVES

RUSSELL



No. 2025—3 in. Steel Blade, Beechwood Handle....\$4.00 One Dozen in a Box.

## BANANA KNIVES

RUSSELL



One Dozen in a Box.

SLOYD KNIVES

R. MURPHY



Polished Rubberoid Handle, Riveted, Closed Ferrules High Grade Steel, Well Tempered and Ground.

	1 136 256 3 3 6.75
Per Dozen \$6	1.00 6.75
One Dozen in a Box.	

# MANUAL TRAINING KNIVES



Polished Rubberoid Handle, Closed Ferrule, Riveted Per Dozen No. 2½ M—2½ in. High Grade Steel Blade......\$4.50 One Dozen in a Box.

# PATTERN AND SHIRT CUTTERS KNIVES

BLADES ONLY



Special High Grade Steel, Ground and Tempered
Per Dozen

No. 1—Blade Only, ½ in. Wide, 8 in. Long........\$3.00 No. 2—Blade Only, % in. Wide, 9 in. Long........ 3.75



#### Collar and Cuff Blades

#### HANDLES ONLY



# EXTENSION BLADES



Special High Grade Steel, Ground and Tempered Per Dozen No. 032—5 in. Wide, 4 % in. Long, Bevel Point...\$2.00

# EXTENSION BLADE HANDLES



Black Enameled Wood

Per Dozen sion Blades. . \$9.00

No. 0-41/4 in. Long, for No. 01/2 Extension Blades. . \$9.00

# FARRIERS KNIVES

HELLER



Forged Crucible Tool Steel Blades

One-half Dozen in a Box.

### OIL CLOTH KNIVES

RUSSELL



Particularly adapted to cutting Linoleum and Roofing Paper.

Per Dozen

No. 424—2½ in. Crucible Steel Blade......\$6.50 One-half Dozen in a Box.

## PAPER HANGERS KNIVES

RUSSELL



Burnt Wood Handle

No. 5—3 % x1 1/4 in. Round Point High Grade Steel Blade, Hardened, Tempered and Ground......\$4.50

### PUTTY KNIVES

RUSSELL





Especially Designed for the Professional Painter

Heavy Gauge High Grade Steel Blade, Large Cocobolo Handle, Metal Bolster.



High Grade Steel Blade, Solid Cocobolo Handle, Closed End Brass Ferrule Per Doze



Tempered Cutlery Steel Blade, Red Stained Wood Handle,
Brass Ferrule Per Dozen
No. 135—3½x1½ in. Blade......\$2.40
All Above, One Dozen in a Box.

# SCRAPING KNIVES

RUSSELL



Cocobolo Handle

Full Forged High Carbon Steel, Drop Forged Bolster.

No. 525E—Elastic Blade
Width Blade, Inches.... 2½ 3 3½ 4
Per Dozen ....... \$11.60 12.70 13.70 15.00
One-half Dozen in a Box.

P. B.



No. 125—Natural Finish Beech Handle, Rust-proof Screws, Tempered Steel Blade

 Width of Blade, Inches....
 3
 3½
 4

 Per Dozen
 \$2.50
 2.75
 3.00

 One Dozen in a Box.

READING



Japanned Iron Handle

### GAME SHEARS



Each

No. 7125—Solid Steel, Saw Tooth Blade and Bone Cracker, Nickeled Volute Spring, Corrugated Handles, with End Lock, Full Nickel Plated . . . . . . \$3.00 One in a Box.

# KNIFE SHARPENERS

CARBORUNDUM



A Round Carborundum Shaft, Firmly Secured to Stained Wood Handle by a Steel Rod Extending its Entire Length, Nickel Plated Ferrule and Guard.

Per Dozen No. 76-Length Over All 14 in......\$6.00 One Dozen in Display Box.

# BUTCHER STEELS



No. 54-Double Cut Steel, Black Enameled Grooved Handle, White Metal Round Guard, Nickel Plated Ferrule, Galvanized Ring and Swivel.

12 15.00 18.00 One-half Dozen in a Box.

## HOUSEHOLD CLEAVERS

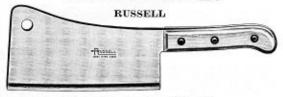
RUSSELL



Beechwood Handle, Riveted

Per Dozen No. 2346-6 in. Forged Steel Blade, Weight Each

### LAMB CLEAVERS



### No. 2581—Beechwood Handle

Full Forged Solid Steel Blade and Tang, Heavy Steel Rivets. Length Blade, Inches . . . . .

## MARKET CLEAVERS



No. 2580-Beechwood Handle

Full Forged Solid Steel Blade and Tang, Heavy Steel Length Blade, Inches..... Weight Each .... 2 lb. 11 oz. 3 lbs. 3 lb. 6 oz. \$51.00 Per Dozen ...... 54.50 60.50

# BEEF CARVERS

RUSSELL



Hand Forged High Carbon Crucible Steel

No. 1521-Two Pieces, Knife and Fork, 8 in. Blade, Vul-Stag Handles, Nickel Silver Caps, Folding Guard on Fork.....\$3.50



Hand Forged High Carbon Crucible Steel

Per Pair No. 1541-Two Pieces, Knife and Fork, 8 in. Blade, Vul-Stag Handles, Nickel Silver Caps, Folding Guard on Fork..... .88.50



Hand Forged High Carbon Crucible Steel Per Pair

No. 1561-Two Pieces, Knife and Fork, 8 in. Blade, Vul-Stag Handles, Nickel Silver Caps, Folding Guard on Fork......\$3.50

### RUSSELL STAINLESS



Forged Best Grade Stainless Steel

Per Set

No. 16792-Three Piece Set, Knife, Fork and Steel. 8 in. Blade, Vul-Stag Handles, Nickel Silver Caps, Folding Guard on Fork.....



Forged Best Grade Stainless Steel

Per Set

No. D76791-Three Piece Set, Knife, Fork and Steel, 8 in. Blade, Genuine Stag Handles, Heavy Sterling Silver Ferrules, Folding Guard on Fork .. \$8.70



Forged Best Grade Stainless Steel

Per Set

No. L16691-Three Piece Set, Knife, Fork and Steel. 8 in. Blade, Vul-Stag Handles, Nickel Silver Fer-



## Forged Best Grade Stainless Steel

Per Set

No. EX16791—Three Piece Set, Knife, Fork and Steel, 8 in. Blade, Vul-Stag Handles, Nickel Silver Ferrules, Folding Guard on Fork......\$7.50

Note-Vul-Stag (Hard Rubber) Handles are Indestruct-Will not crack nor burn.

All Above, One Pair or Set in Cloth Lined Box.

### BEEF CARVERS

### RUSSELL STAINLESS

Stainless Blades are forged from best grade of steel. Forks have a folding guard.



Knobby	Natural	Horn	Hand	les
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Per Set

No. E56697MF-Three Piece Set, Knife, Fork and Steel, 8 in. Mirror Finish Blade, Sterling Silver Ferrules, Folding Guard on Fork......\$11.50



### Genuine Stag Handles

Per Set

No. C75692-Three Piece Set, Knife, Fork and Steel. 8 in. Blade, Sterling Silver Ferrules, Folding Guard on Fork......\$10.00



#### Zylonite Ivory Grain Handles

Per Set

No. 45693-Three Piece Set, Knife, Fork and Steel, 



#### Zylonite Ivory Grain Handles

Per Set

No. 45695-Three Piece Set, Knife, Fork and Steel, 8 in. Blade, Folding Guard on Fork......\$7.75



#### Genuine Stag Handles

Per Set

No. A75691—Three Piece Set, Knife, Fork and Steel, 8 in. Blade, Sterling Silver Ferrules, Folding Guard on Fork . . \$ 9.30

No. A75691-5-Five Piece Set, Same as Above, with 6 in. Blade Knife and Fork in Addition..... 15.50



### Genuine Stag Handles

Per Set

No. E75691-Three Piece Sets, Knife, Fork and Steel, 8 in. Blade, Sterling Silver Ferrules, Folding Guard on Fork ...... \$10.00

No. E75691-5-Five Piece Set, Same as Above, with 6 in. Blade Knife and Fork in Addition......17.00 All Above, One Set in a Cloth Lined Box.

### BIRD CARVERS



### Zylonite Ivory Grain Handles

Per Pair

No. 44395-Two Pieces, Knife and Fork, 6 in. Stainless Steel Blade, 2 Prong Fork......\$8.30

### BIRD CARVERS

RUSSELL STAINLESS

Stainless Blades are forged from the best grade of steel, No Guard on Forks.



### Vul-Stag Handles

Per Pair

No. 15691-Two Pieces, Knife and Fork, 51/2 in. Blade, Nickel Silver Caps...... .. 85.20



#### Vul-Stag Handles

Per Pair

No. L16691-Two Pieces, Knife and Fork, 51/2 in. Blade, Nickel Silver Ferrules..... \$6.00



### Vul-Stag Handles

Per Pair

No. 16791-Two Pieces, Knife and Fork, 51/2 in. Blade, Nickel Silver Caps... . . \$5.20



#### Genuine Stag Handles

Per Pair

No. C76791-Two Pieces, Knife and Fork, 51/2 in. All Above, One Pair in a Cloth Lined Box.

### MEDIUM KNIVES AND FORKS STEAK PATTERN



#### Hard Rubber Handles

Per Set

No. 1209-Knives and Forks, Polished Stainless Steel Swaged Blades, 3% in. Handles, Four Tine 



### Ivoride Handles

Per Set

No. 2209—Knives and Forks, Polished Stainless Steel Swaged Blades, 334 in. Handles, Four Tine ....\$9.00



### Zylonite Ivory Grain Handles

Per Set

No. 4409MF-Knives and Forks, Stainless Steel Mirror Finish Swaged Blades, 3 % in. Handles, Four Tine Forks...... \$15.00

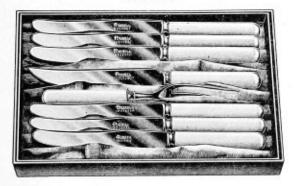


### Ebonwood Handles, Nickel Silver Rivets

Per Set No. 66169-Knives and Forks, Polished Stainless Steel Swaged Blades, Four Tine Forks......\$6.00 One Set (Six Knives and Six Forks) in a Box.

## STEAK SETS

RUSSELL



#### Stainless Steel

### TABLE KNIVES AND FORKS

RUSSELL



Per Set

No. 118—Knives and Forks, 5¼ in. Rocker Steel Blade, 3¾ in. Cocobolo Handles, 4 Tine Forks. \$2.00 No. 118K—Knives Only . . . . . . . . . . . Per Dozen, 2.00





Per Set

No. 1563C—Knives and Forks, 5 ¼ in. Cimeter Swaged Polished Steel Blades, 3 % in. Cocobolo Handles, Metal Bolster and Cap, 4 Tine Forks......\$1.50 No. 1563CK—Knives Only .........Per Dozen, 1.50



Medium Knives and Forks, Highly Polished Straight Blades, 3 % in. Ivoride Handles, 4 Tine Forks.

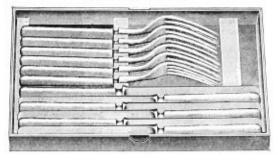
	Tiich (	Sorbon	Steel	 	\$ 7.00
No. 211	Stainle	se Stee	1	 Der Dozon	13.00
No. 2119	- Knives	Only		 Per Dozen,	7.00
No. 211K	-Knives	Only		 Per Dozen,	13.00



Per Set

# KNIVES AND FORKS

NICKEL SILVER



Solid Nickel Silver, Not Plated, Will Not Rust as there is no plate to wear off.

No. 90—Medium Knives and Forks, Cimeter Swaged Blades, Round End Handles, 4 Tine Forks....\$4.50 One Set (Six Knives and Six Forks) in a Box.

### SILVER PLATED

Full A1 Plate on Medium Weight Blanks

Per Set

No. 77—Medium Knives and Forks, Straight Blades, Solid Round End Handles, 4 Tine Forks.........\$7.60 One Set (Six Knives and Six Forks) in a Box.

### SILVER PLATED SPOONS

Simeon L. & George H. Rogers



Windsor Pattern

# NICKEL SILVER SPOONS



Shell Pattern, Light Weight



Beaded Pattern, Medium Weight



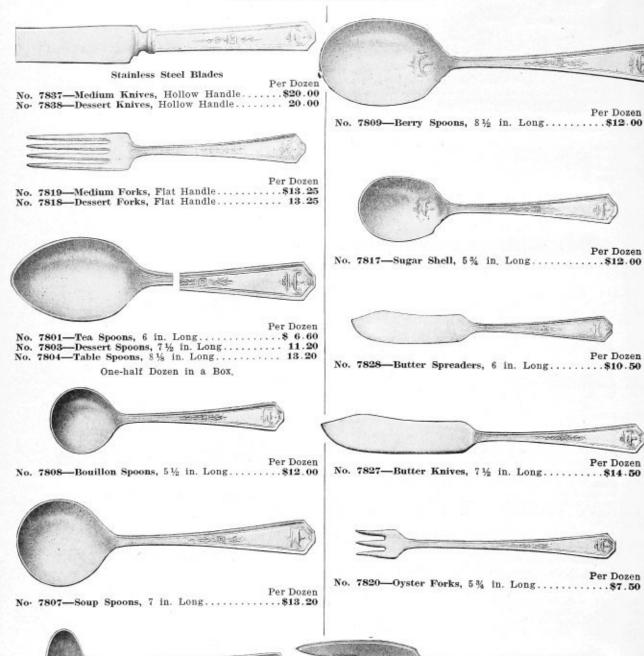
Windsor Pattern, Heavy Weight

### SILVER PLATED WARE

# SIMEON L. AND GEORGE H. ROGERS

Highest Grade Triple Plated Ware, with Extra Sectional Plating at All Wearing Points of Every Spoon and Fork, Increasing the Wear 300 Per Cent

### APOLLO PATTERN, GRAY FINISH



# SILVER PLATED WARE

SIMEON L. & GEORGE H. ROGERS

Highest Grade Triple Plated Ware, with Extra Sectional Plating at all Wearing Points of Every Spoon and Fork, Increasing the Wear 300 Per Cent.

JEFFERSON PATTERN, BRIGHT FINISH



				rer Dozen	
No.	7575-Medium	Knives,	Hollow	Handle\$20.00	
No.	7576—Dessert	Knives,	Hollow	Handle 20.00	



				1	er Dozen
No.	7531-Medium	Forks,	Flat	Handle	\$13.25
No.	7530—Dessert	Forks,	Flat	Handle	13.25



No.	7501—Tea Spoons, 6 in. Long	50.25	\$ 6.60
No.	7503—Dessert Spoons, 7½ in. Long		11.20
No.	7504—Table Spoons, 8 1/8 in. Long		13.20
	One-half Dozen in a Box.		













No. 7546—Butter Spreaders, 6 in. Long......\$10.50









### ALARM CLOCKS



Continuous Alarm, Bell on Back

One Day Time and Alarm, Nickel Plated Case, White Dial with Large Numerals, with Shut-Off Switch.

Tingle-4% in Dial, Height 6 in......\$2.00



### Bell on Back, Long Alarm, Shut-Off Switch

Nickel Plated Brass Octagon Case, 40 Hour Movement, White Dial, Convex Glass.







Radium Dial.

### Intermittent Alarm, Bell on Back

Nickel Plated Seamless Brass Octagon Case, 40 Hour Movement, 2¼ in. Cubist Dial, Width 2¾ in., Height 3¾ in., Convex Glass, Alarm Rings and Stops in 20 Second Intervals, with Shut-Off Switch.

	Each
Tidy-Tot-Plain Dial	
Tidy-Tot-Radium Dial	(Black)
	(2000)

## ALARM CLOCKS



Gold Bronze Finish Square Case

Back Bell Alarm, 40 Hour Movement, Open Skeleton Hands, 3½ in. Dial, Large Numerals, 3¾ in. Square, Bowed Glass.



Gold Bronze Finish Square Case

Back Bell Alarm, 40 Hour Movement, Open Skeleton Hands, 3½ in. Dial, Large Numerals, 3¾ in. Square, Bowed Glass.

Radium Tell-Tale—Radium Dial......\$3.00



Eight Day, Signal Automatic Alarm

Nickel Plated Brass Octagon Case, Convex Glass, Runs 8 Days and Alarms Automatically Every 24 Hours for 8 Days, Signal on Dial Shows Whether Alarm will Ring, Silent Beat and Switch.

## ALARM CLOCKS



Intermittent Alarm, Bell on Back

Nickel Plated Brass Octagon Case, 40-Hour Movement, Cubist Dial, Convex Glass, Alarm Rings and Stops in 20 Second Intervals, with Shut-Off Switch.

Tom-Tom-4 1/4 in. Plain Dial, Width 4 1/8 in., Height ....\$3.50 5 1/2 in. ....

One in a Box.

Per Dozen



Intermittent Alarm, Bell on Back

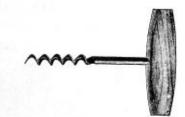
Nickel Plated Brass Octagon Case, 40-Hour Movement, Cubist Dial, Convex Glass, Alarm Rings and Stops in 20 Second Intervals, with Shut-Off Switch.

Radium Tom-Tom-4 1/4 in. Radium Dial, Width 4 1/8 in., Height 5 1/2 in.....\$4.50

One in a Box.

### CORK SCREWS

WALKER



Polished Maple Handle

Per Dozen No. 37½—Length Over All 4½ in., Special Steel Screw Carefully Tempered, Steel Finish, Weight Per Dozen 

One Dozen in a Box.

### NIFTY



A Combination Crown Cap Lifter and Folding Cork Screw.

No. 63A-Heavy Metal, Coppered, Heavily Nickel Plat-ed and Highly Polished, Suitable for the Pocket and Key Chain ......\$3.00 One Dozen on a Four-Color Display Card.

# HORSE SHOE MAGNETS

WALKER SELF-PULLING

Polished Maple Handle, Wire Cutter Attachment

Special Steel Screw, Nickel Plated, Weight Per Dozen

One in a Box, One Dozen in a Carton.

No. 39-Length Over All 5 34 in., Carefully Tempered



Best Quality, Painted Red, Polished Poles

Length, In 3 4 5 6	Nos	8
Per Dozen \$1.00 2.00 4.00 6.00	Wt. Set of Four, Lbs	8
Length, In 8 10 12	Diameter, Inches	5
Per Dozen \$12.00 18.00 27.00	Per Set of Four	\$1.25

# QUOITS



Cast Iron, Clean and Smooth

One Each Set, Two of the Quoits are Marked "A" and Painted Yellow; Two are Marked "B" and Painted Red.

Nos	8	12
Wt. Set of Four, Lbs	8	12
Diameter, Inches	5	5 %
Den Cat of Four	21 95	1 75

### PITCHING SHOES



Official Standard

Highest Grade Certified Malleable Iron. Very Smooth, Easier to Control than Steel Shoes. Guaranteed Against Breakage. Finished in Red and Black Per Set Enamel.

Craftsman-Weight Each Shoe, 2 1/2 Lbs., Four Shoes to a Set .....\$2.25 One Set in a Box, with Rules.

# METALLIC CARTRIDGES RIM FIRE





Grains .



#### Bullet Breech Caps

Per 1000 .22 (B.B.) Caps - Smokeless Powder, Bullet, 20 ...\$3.50 100 in a Box, 10,000 in a Case; Weight 41 Pounds.

#### Conical Bullet Caps

Per 1000 .22 (C.B.) Caps - Smokeless Powder, Greaseless Bul-...,\$4.40

let, 30 Grains...... Adapted to Flobert and all .22 Caliber Rim Fire Single Shot Rifles. 100 in a Box, 10,000 in a Case; Weight 59 Pounds.

#### Solid Lead Bullet, 30 Grains

Per 1000 .....\$5.00 .22 Short-Semi-Smokeless Powder . . . .22 Short-Smokeelss Powder, Greased Bullet . . . . . 5.35 Adapted to Rifles and Revolvers of this Caliber. 50 in a Box, 10,000 in a Case; Weight 65 Pounds.



### Solid Lead Bullet, 30 Grains

Per 1000 ......\$6.00 . . . . 7.50 Adapted to Rifles and Pistols of this Caliber. 50 in a Box, 10,000 in a Case; Weight 70 Pounds.

#### CENTER FIRE



### Metal Cased Bullet, 50 Grains

Per 1000 .25 Colt Automatic—Smokeless Powder..... ...\$29.00 Adapted to Colt, Browning, H. & R. and other Automatic Pistols. 50 in a Box, 5000 in a Case; Weight 66 Pounds.



#### Solid Lead Bullet, 85 Grains

Per 1000 .32 S. & W.—Semi-Smokeless Powder . . . . . . . . . . . . . \$19 . 25 .32 S. & W .- Smokeless Powder ..... . . . . . . . . 21 . 00 Adapted to S. & W., Colt and other Revolvers. 50 in a Box, 5000 in a Case; Weight 98 Pounds.



#### Solid Lead Bullet, 98 Grains

Per 1000 .38 S. & W. Long-Semi-Smokeless Powder......\$21.00 Adapted to S. & W. Hand Ejector and Colt Revolvers. 50 in a Box, 5000 in a Case; Weight 117 Pounds.



#### Metal Cased Bullet, 74 Grains

Per 1000 .32 Colt Automatic-Smokeless Powder . . . . ..\$31.50 Adapted to Remington, Colt, Savage and other Automatic Pistols.

50 in a Box, 5000 in a Case; Weight 100 Pounds.

### METALLIC CARTRIDGES CENTER FIRE

Per 1000 Solid Lead Bullet, 146 Grains 

.38 S. & W.—Smokeless Powder ...... 27.25 Adapted to S. & W., Colt Police and other Revolvers. 50 in a Box, 2000 in a Case; Weight 63 Pounds.

# BLANK CARTRIDGES RIM FIRE

Per 1000 ....\$3.00

.22 Short—Semi-Smokeless Powder.... 50 in a Box, 10,000 in a Case; Weight 20 Pounds.

### CENTER FIRE



Per 1000

.32 S. & W.—Semi-Smokeless Powder.... ...811.00 50 in a Box, 5000 in a Case; Weight 32 Pounds.



Per 1000

...\$14.00 ,38 S. & W .- Semi-Smokeless Powder . . . 50 in a Box, 2000 in a Case, Weight 22 Pounds. All Blanks adapted to Revolvers and Rifles.

# AIR RIFLE SHOT IN TUBES

TATHAM'S BOY SCOUT, LEAD



Uniform Size, Absolutely Round

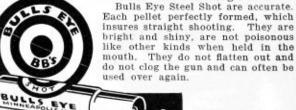
Made with special care to fit most makes of Air Rifles, the tube is designed for pocket use and by turning the band the shot may be removed as wanted.

Per Case

No. 100-250 Pellets in a Tube, Weight 5 Oz., 100 Tubes in a Case, Weight Per Case 34 Lbs.....\$7.25

### BULLS EYE STEEL

The Perfect Shooting Pellets



Per Case No. 1-180 Pellets in Brown Kraft Paper Tube with Slip-off Cover, Size of Tube 3 1/2 x 1/4 in., 100 Tubes 

# H. & R. REVOLVERS

H. & R. PREMIER, HAMMER



"Small Frame"

Double Action Automatic Ejector. Rubber Stock.

.22 Caliber, Rim Fire, 7 Shots

For .22 Short, Long and Long Rifle R. F. Cartridges.

Each
No. 22B —Blued, 3 in. Barrel, Weight 13 Oz...\$10.00
No. 22PNP—Nickel Plated, 3 in. Barrel, Weight

.32 Caliber, Center Fire, 5 Shots
For 32 S. & W. C. F. Cartridges. Each
No. 32PB —Blued, 3 in. Barrel Weight 12 Oz. \$10.00
No. 32PNP—Nickel, 3 in. Barrel, Weight 12 Oz. 10.00

H. & R. AUTOMATIC EJECTING, HAMMER



"Heavy Pattern"

Double Action Automatic Ejector. Rubber Stock.

.38 Caliber, Center Fire, 5 Shots

For .38 S. & W. and Colt New Police C. F. Cartridges, Each No. 38AEB —Blued, 3 ¼ in. Barrel, We'ght 15 Oz. \$10.00 No. 38AENP—Nickel, 3 ¼ in. Barrel, Weight 15 Oz. 10.00

H. & R. HAMMERLESS



"Small Frame"

Double Action Automatic Ejector, Independent Cylinder Stop. Rubber Stock.

.22 Caliber, Rim Fire, 7 Shots For .22 Short, Long and Long Rifle R. F. Cartridges.

No. 22HB —Blued, 3 in. Barrel, Weight 13 Oz... \$11.00 No. 22HNP—Nickel, 3 in. Barrel, Weight 13 Oz... 11.00

.32 Caliber, Center Fire, 5 Shots

For .32 S. & W. C. F. Cartridges. Each No. 32HB —Blued, 3 in. Barrel, Weight 13 Oz...\$11.00 No. 32HNP—Nickel, 3 in. Barrel, Weight 13 Oz... 11.00



"Large Frame"

Double Action Automatic Ejector, Independent Cylinder Stop. Rubber Stock.

.38 Caliber, Center Fire, 5 Shots

For .38 S. & W. and Colt New Police C. F. Cartridges.

No. 38HB —Blued, 3 ¼ in. Barrel, Weight 17 Oz. \$11.00 No. 38HNP—Nickel, 3 ¼ in. Barrel, Weight 17 Oz. 11.00

# H. & R. REVOLVERS

AMERICAN DOUBLE ACTION



Solid Frame

Double Action, Rubber Stock.

.32 Caliber, Center Fire, 6 Shots

For .32 S. & W., S. & W. Long and Colt New Police C. F.
Cartridges. Each
No. 32AB —Blued, 2 ½ in. Barrel, Weight 16 Oz.. \$4.50
No. 32ANP—Nickel, 2 ½ in. Barrel, Weight 16 Oz.. 4.50

.38 Caliber, Center Fire, 5 Shots

For .38 S. & W. and Colt New Police C. F. Cartridges. Each No. 38AB —Blued. 236 in Barrel, Weight 15 Oz. 84.

No. 38AB —Blued, 2½ in. Barrel, Weight 15 Oz. 84.50 No. 38ANP—Nickel, 2½ in. Barrel, Weight 15 Oz. 4.50

### YOUNG AMERICA



Solid Frame

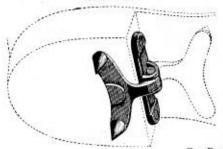
Double Action. Rubber Stock.

.22 Caliber, Rim Fire, 7 Shots

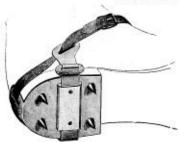
For .22 Short and Long R. F. Cartridges. Each No. 22YB —Blued, 2 in. Barrel, Weight 8½ Oz... \$4.50 No. 22YNP—Nickel, 2 in. Barrel, Weight 8½ Oz... 4.50

# ICE CREEPERS

SECURITY



### BLUE RIBBON



Per Dozen Pairs
No. 11—Steel Plate
and Points, with
Straps (One Size
Only) . . . . . \$3.00

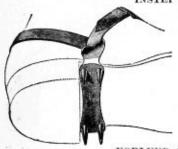
Will fit heels 2 1/4 to 3 1/4 in. wide. For either shoe or rubber, by adjusting folding wings.

One Dozen Pairs in a Box.

No

## ICE CREEPERS





#### Malleable Plate. Japanned

A very practical Creeper. It may be worn on a Rubber Boot or Overshoe.

Per Dozen Pairs No. 50-With Straps 

One Dozen Pairs in a Box.

NORLUND OK



### Made of Good Quality Tempered Steel

Light and Strong, can be adjusted to fit several Sizes of Heels, easily applied and quickly removed.

Size Large Medium Small	Nos.			0	1	2
Per Dozen Pairs \$4.20 4.20 4.20	Size			Large	Medium	Small
	Per	Dozen	Pairs	\$4.20	4.20	4.20

One Dozen Pairs of a Size in a Box.

### ICE CREEPERS JAMESTOWN



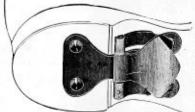
#### Galvanized Iron Plate, Hardened Steel Points

Heel Band of Best Quality Rubber, the Tension holding the Creeper well in place.

4			Per 1	Dozen Pairs
٥.	1-For	Men's Shoes		
		Women's Shoes		

One Dozen Pairs in a Box.

#### WOMENS REVERSIBLE



### Black Oxidized Steel

For use on low and medium Heels, especially adapted to Ladies Arctics, Rubbers and Overshoes, Rivets to the Heel as well as to the Shank of Shoe.

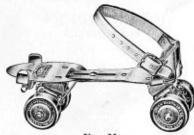
May be worn on the street or in the house, when not in use the Spur Plate is returned to the shank.

Per Dozen Pairs No. 90-With Rivets ......\$3.00 One Dozen Pairs in a Box.

# ROLLER SKATES

#### BALL BEARING EXTENSION

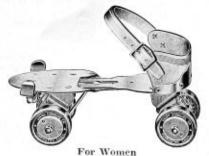
Best Cold Rolled Swedish Steel. Oscillating Trucks, Turn in a 3 foot Circle, Self-Contained Steel Rolls.



For Men

Per Pair

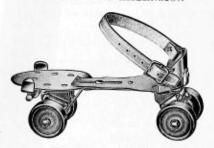
No. 5SC-Half Strap Heel, Large Foot Plates, Clamp Toe, Nickel Plated, Formed Steel Loop Protects Strap and Prevents Their Cutting or Pulling Out, 



Per Pair

No. 6SC-Full Strap Leather Heel, Clamp Toe, Nickel 

# PLAIN BEARING EXTENSION

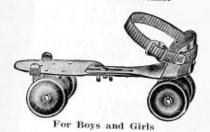


For Boys and Girls

Cold Rolled Swedish Steel Tops, Trucks and Clamp. Oscillating Trucks, Rubber Cushions, Turn in 3 foot Circle.

Per Pair No. 10-Half Strap Heel, Clamp Toe, Steel Rolls, Bright Finish, Extends from 71/2 to 10 in .... \$2.00

# EXTENSION SIDEWALK



Have High Grade Homogeneous Steel Tops, High Steel Backs, Adjustment is Easily Made.

Per Pair No. 3-Web Strap at Heel, Clamps at Toe, Steel 



